FORM NO. 3318–705

TORO®

Proline®

20 HP Kohler Mid–Size Hydro Traction Unit

Model No. 30192 – 790001 & Up

PROTOTYPE

Parts Catalog

ORDERING REPLACEMENT PARTS

To order replacement parts, please supply: the part number, the quantity, and the description of each part desired.

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Note:

Part Description Abbreviations

Part descriptions in this catalog may include the following abbreviations.

Abbreviation	Meaning
AR	as required
ASM	assembly
CARR	carriage
DEG	degrees
FH	flat head
GA	gauge
HF	hex flange
HFW	hex flange washer
HH	hex head
HHF	hex head flange
HHST	hex head self tapping
HJ	hex jam
HOC	height-of-cut
HS	hex socket
HSBH	hex socket button head
HSFH	hex socket flat head
HSH	hex socket head
HWH	hex washer head
HWHTF	hex washer head thread forming
INC	incorporated
LH	left hand
PH	pan head
PPH	Phillips pan head
PTO	power take off
RH	right hand
SFH	slotted fillister head
SH	square head
SHWH	slotted hex washer head
SPH	slotted pan head
STD	standard
TAP	self tapping
TH	truss head
TTH	Torx truss head
WH	wing head

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Important Format Explanations

This catalog uses special formats to convey information in illustrations and parts lists. Specifically, one format is used in conjunction with service assemblies and another with quantities associated with reference numbers.

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Service Assemblies

Parts within service assemblies have reference numbers in the form *X:Y. X* is the reference number of the service assembly and *Y* is a sequential number unique to each part within the service assembly.

For example, a wheel assembly might be identified by reference number 6, the tire by 6:1, the valve by 6:2, and the wheel by 6:3. When you order the assembly identified by reference number 6, you receive all parts identified by reference numbers 6:1, 6:2, and 6:3. However, you may also order any part individually.

Reference numbers of this type appear in part lists and as callouts in illustrations.

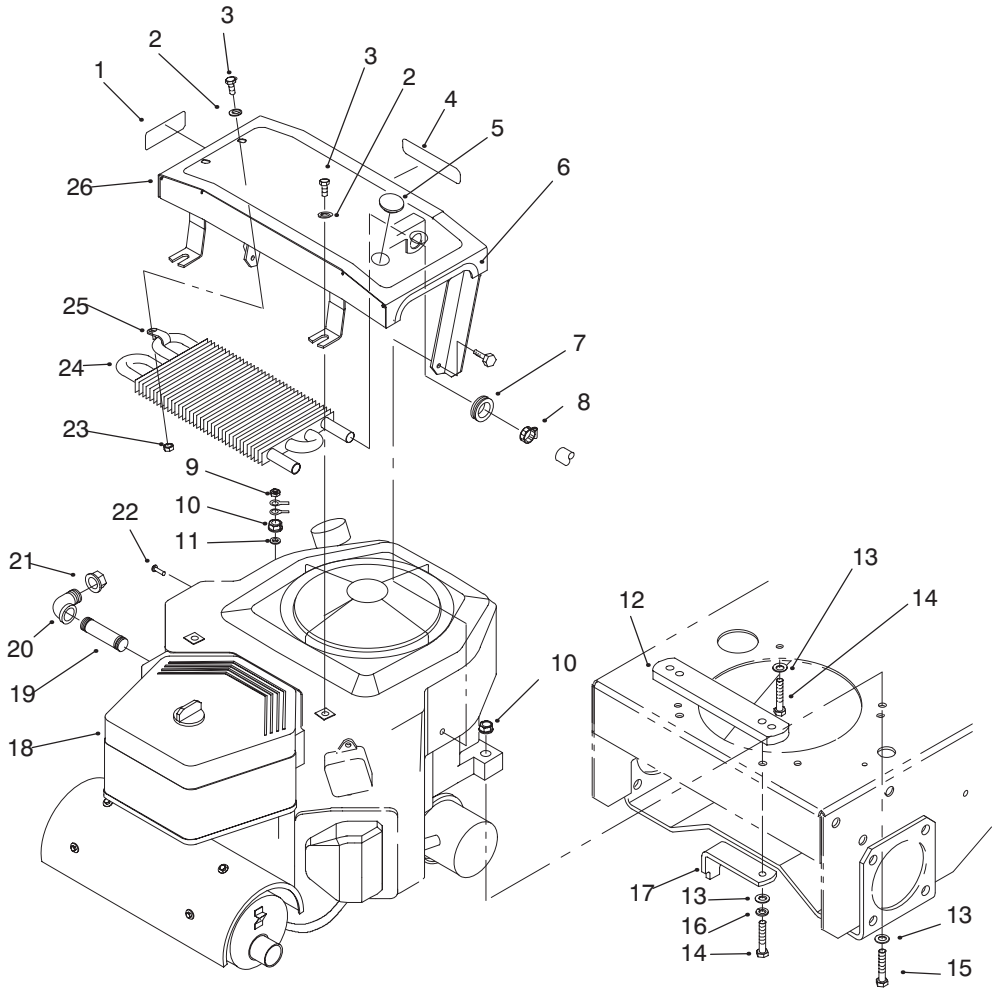
PROTOTYPE

Reference Numbers with Quantities

Illustrations may have a quantity in parentheses next to a reference number, in the form *X (Y). X* is the reference number. *Y* in parentheses is the quantity of the part identified by the reference number.

For example, the illustration callout 4 (2) indicates that two parts are used in that instance.

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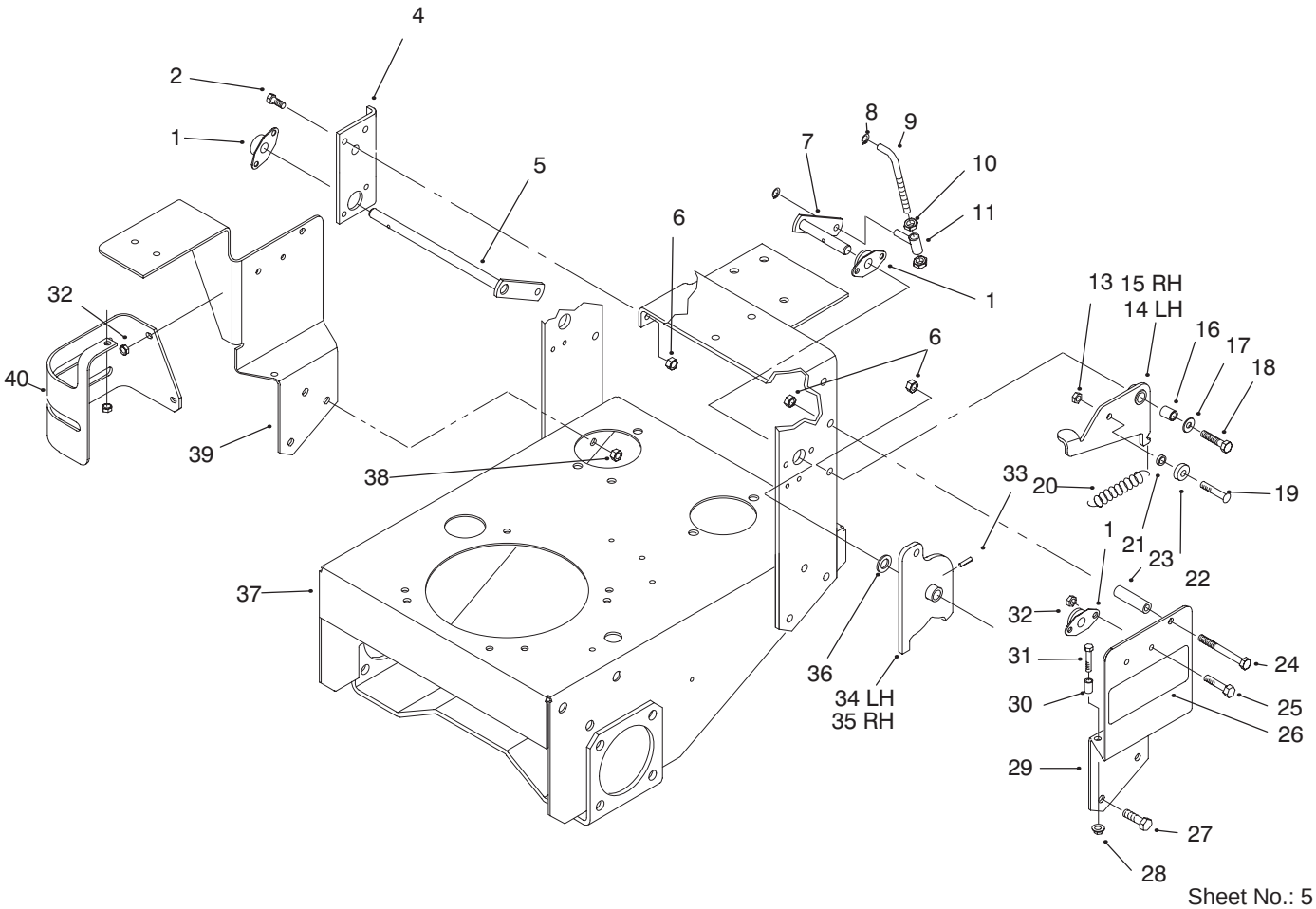
Sheet No.: 2

20 HP Engine & Oil Cooler

Ref. No.	Part No.	Qty.	Description
1	95–2814	1	Decal–Fuel Shut–Off
2	3256–1	4	Washer–Flat
3	321–39	4	Screw–HH
4	54–0890	1	Decal–Rotating
5	2410–71	2	Cap–Plug
6	29–0642	1	Jiffy–Trim
7	240–9	2	Grommet
8	2412–136	2	Clamp
9	32149–1	1	Nut–Keps
10	32153–3	4	Nut
11	3255–8	1	Washer–Lock
12	93–1176	2	Spacer–Engine
13	3256–23	4	Washer–Flat
14	322–11	2	Screw–HH
15	322–9	2	Screw–HH
16	3253–4	A/R	Washer–Lock
17	51–4540–03	1	Retainer–Clutch
18	93–1169	1	Engine–Kohler
19	289–42	1	Nipple–Pipe
20	2811–10	1	Elbow
21	288–4	1	Cap–Pipe
22	32144–74	2	Screw
23	3296–42	2	Nut–Lock
24	82–4220	1	Cooler–Oil
25	2412–134	2	Clamp R
26	93–1183–03	1	Mount–Cooler

Ref. No.	Part No.	Qty.	Description

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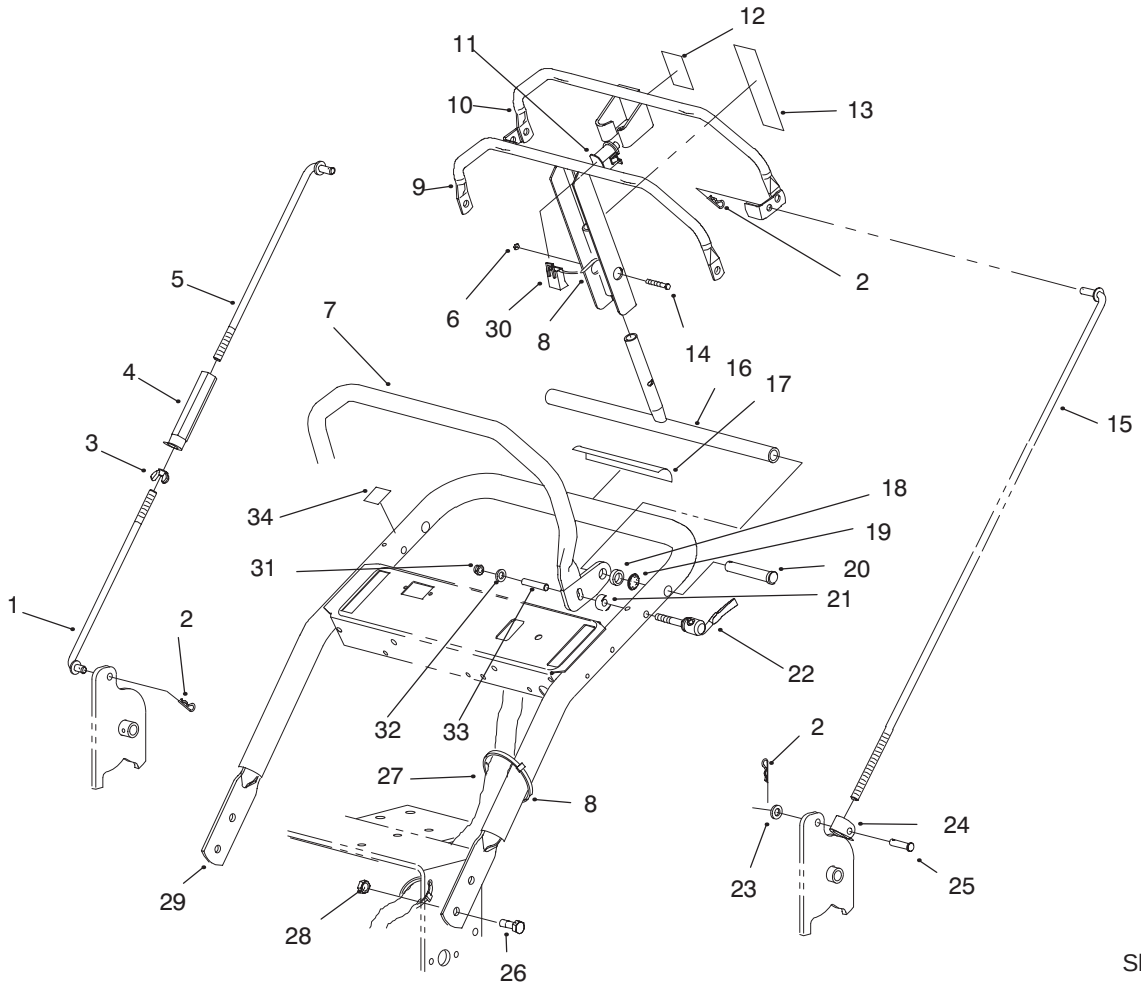
Sheet No.: 5

Pivot & Linkage

Ref. No.	Part No.	Qty.	Description
1	82–4130	4	Bearing
2	322–5	2	Screw–HH
3	3290–378	A/R	Tie–Cable
4	82–4210–01	1	Bracket–Bushing
5	94–9059	1	Lever–Pivot RH
6	3296–29	6	Nut–Lock
7	94–9057	1	Lever–Pivot LH
8	32151–3	4	Ring–Retaining
9	94–9093	2	Rod–Link
10	3218–2	4	Nut–Hex Jam
11	94–9062	2	Sleeve
13	3296–47	2	Nut–Lock
14	82–4330–01	1	Arm–Detent LH
15	82–4340–01	1	Arm–Detent RH
16	82–4370	2	Bushing–Arm
17	3256–23	2	Washer–Flat
18	322–7	2	Screw–HH
19	3274–32	2	Screw–HH
20	82–4160	2	Spring–Detent
21	82–4240	2	Spacer–Bearing
22	251–259	2	Bearing–Ball
23	82–3920	2	Stop–Reverse
24	322–14	2	Screw–HH
25	321–3	11	Screw–HH
26	82–4600	2	Decal–Hydro
27	323–6	6	Screw–HH

Ref. No.	Part No.	Qty.	Description
28	32128–10	2	Nut–Lock HHF
29	95–1530–01	1	Bracket–Pivot
30	95–1516	2	Spacer–Tubular
31	321–8	2	Screw–HH
32	3296–42	11	Nut–Lock
33	32121–4	2	Pin–Roll
34	94–9054–01	1	Arm–Pivot LH
35	94–9061–01	1	Arm–Pivot RH
36	257–5	2	Washer–Thrust
37	94–9096–01	1	Frame ASM
38	3296–39	6	Nut–Lock
39	95–1522–01	1	Bracket–Pivot
40	95–5868–01	1	Guard–Filter

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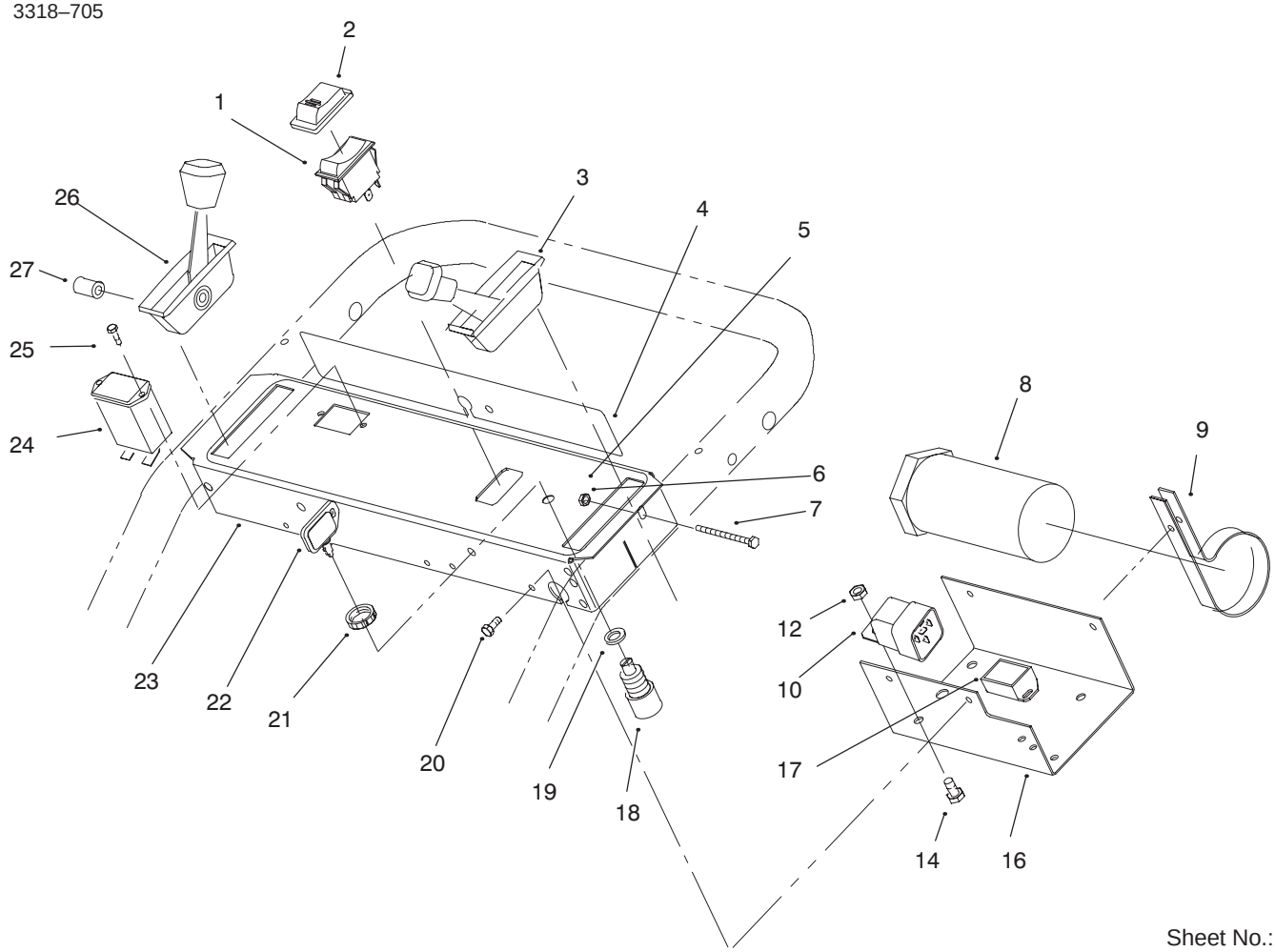
Sheet No.: 6

Handle Assembly

Ref. No.	Part No.	Qty.	Description
1	95–1506	1	Rod–Control
2	3290–307	4	Pin–Cotter
3	32103–3	1	Nut–Wing
4	95–1504	1	Turnbuckle
5	95–1505	1	Rod–Control
6	3296–2	1	Nut Lock
7	95–1536	1	Handle ASM
8	3290–378	3	Tie–Cable
9	95–1507–03	1	Control Bar ASM
10	95–1510–03	1	Bail ASM
11	82–2190	1	Switch–Bail
12	95–1523	1	Decal–Traction Drive
13	95–1524	1	Decal–T Bar
14	32105–12	1	Screw–Hex
15	94–9095	1	Rod–Control
16	95–1513–03	1	Pivot ASM
17	82–4590	1	Decal–Slope Warning
18	95–5855–03	2	Spacer–Pivot
19	32151–80	2	Ring–Push On
20	283–55	2	Pin–Clevis
21	82–3840	2	Spacer–Latch
22	95–5853	2	Lock ASM–Quick Release
23	3256–23	1	Washer–Flat
24	74–0521	1	Rod–Fitting
25	283–6	1	Pin–Clevis

Ref. No.	Part No.	Qty.	Description
26	3234–11	4	Screw–HHF
27	95–2808	1	Harness–Wire
28	32128–21	4	Nut–Hfh
29	95–5856–03	1	Handle–Upper
30	218–595	1	Connector–Body
31	33023–00	2	Nut–Lock Ni
32	3290–436	2	Washer–Belleville
33	95–5854	2	Sleeve
34	95–5862	1	Decal–Speed Lock

PROTOTYPE



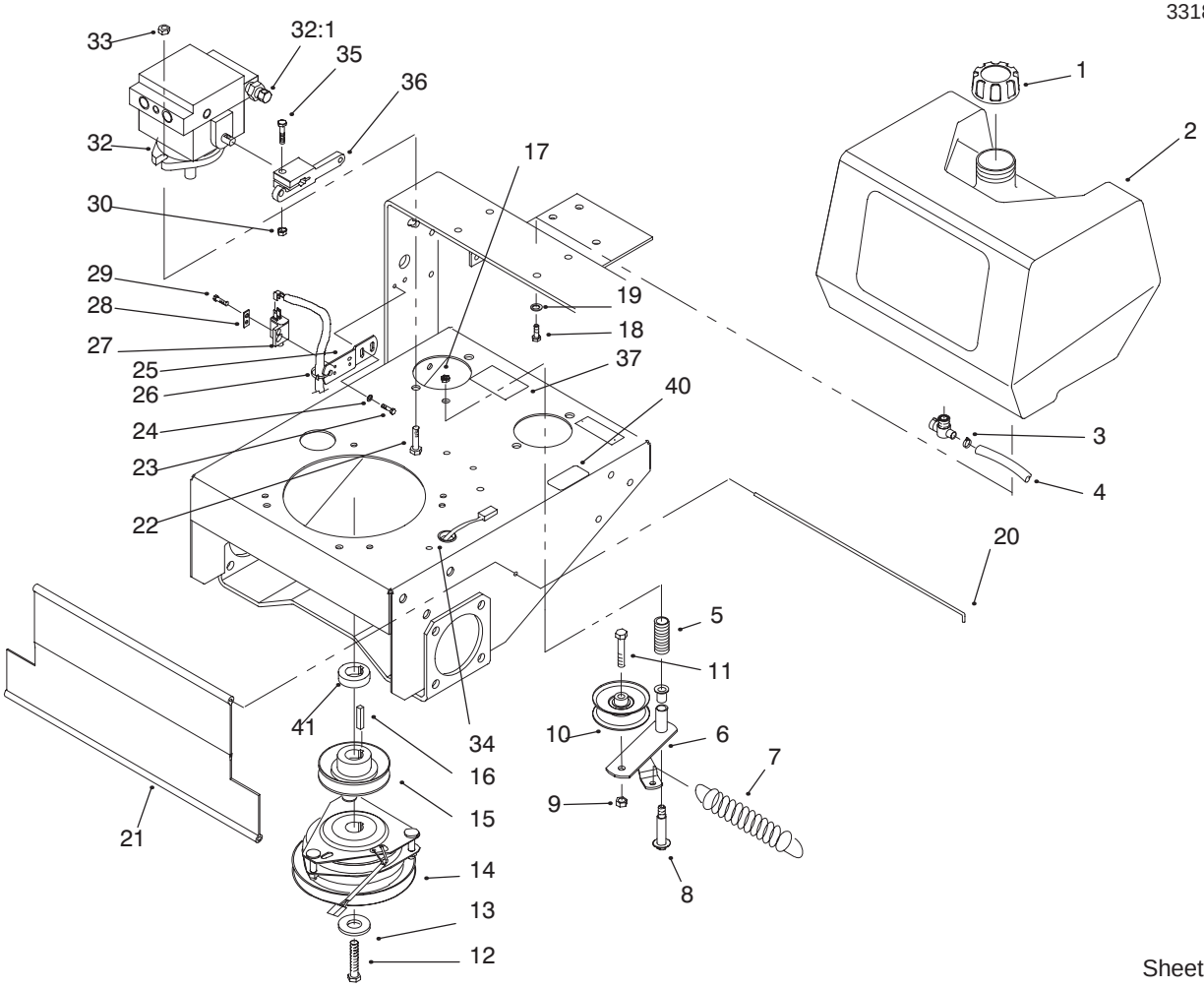
Sheet No.: 7

Control Panel Assembly

Ref. No.	Part No.	Qty.	Description
1	82–2300	1	Switch
2	82–3820	1	Boot–Switch
3	93–1190	1	Control–Throttle
4	95–1544	1	Decal–Warning
5	95–5857	1	Decal–Control Panel
6	3296–2	4	Nut Lock
7	32105–14	4	Screw–HH
8	74–0720	1	Tube–Manual
9	2412–120	2	Clamp–R
10	63–7590	2	Relay
12	3296–42	2	Nut–Lock
14	321–3	2	Screw–HH
16	93–1187–03	1	Panel–Bottom
17	94–9666	1	Module
18	23–0660	1	Switch–Starter
19	3254–5	1	Washer–Lock
20	32104–76	4	Screw–Self TAP
21	218–461	1	Nut–HH (F/W Sw)
22	63–8360	2	Key–Ignition
23	82–2181–03	1	Panel–Control
24	75–6820	1	Hour Meter
25	32144–18	2	Screw–HWH
26	93–1191	1	Control–Choke
27	54–2970	2	Spacer

Ref. No.	Part No.	Qty.	Description

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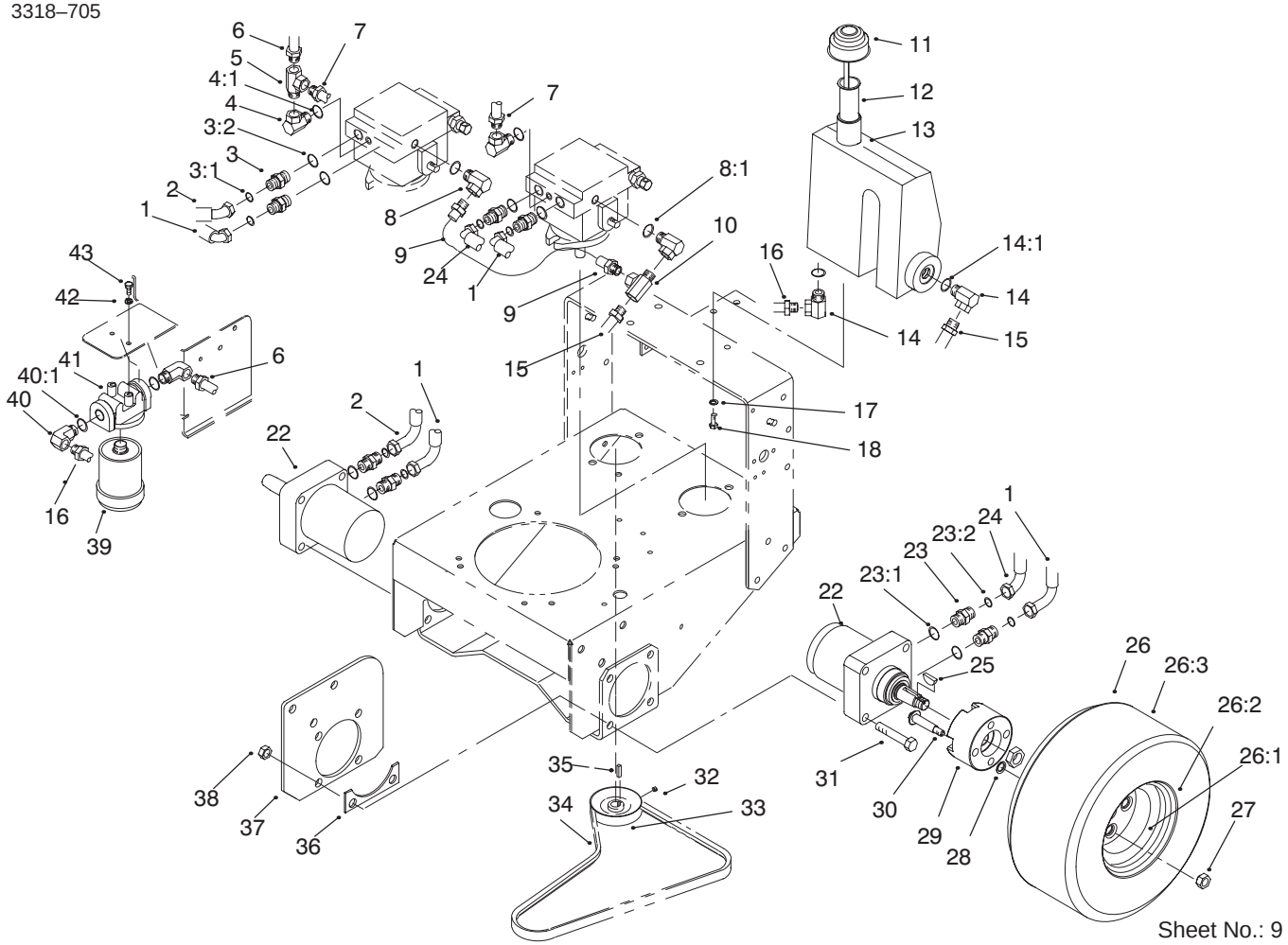
Sheet No.: 8

Fuel Tank, Hydro Pump & PTO

Ref. No.	Part No.	Qty.	Description
1	55–3570	1	Cap–Fuel
2	95–2802	1	Tank–Fuel
3	2412–98	2	Clamp–Hose
4	82–4390	1	Hose–Fuel
5	88–1880	1	Spring–Compression
6	86–4770–03	1	Lever–Idler
7	68–2190	1	Spring–Extension
8	27–6230	1	Bolt–Wheel
9	3296–39	1	Nut–Lock
10	62–4540–03	1	Pulley–Idler
11	323–9	1	Screw–HH
12	3212–9	1	Screw–HH
13	112843	1	Washer–PTO
14	54–3200	1	Clutch ASM
15	44–5940	1	Pulley–Drive
16	5–0930	1	Key–Sq
17	3296–6	1	Nut–Lock
18	322–3	4	Screw–HH
19	3253–4	4	Washer–Lock
20	95–1529	1	Rod–Shield
21	95–1526	1	Trailing Shield
22	324–5	4	Screw–HH
23	32144–3	4	Screw–HWH
24	3256–1	4	Washer–Flat
25	82–4580–03	2	Bracket–Neutral
26	3290–378	2	Tie–Cable

Ref. No.	Part No.	Qty.	Description
27	65–7410	2	Switch–Single Pole
28	82–4570	2	Plate–Switch
29	32144–1	4	Screw–HH
30	3296–29	2	Nut–Lock
32	95–1538	2	Hydraulic Pump ASM
32:1	95–1539	2	Valve ASM
33	32128–42	4	Nut–Hex Flange
34	237–124	1	Grommet
35	322–7	2	Screw–HH
36	82–3790	2	Arm–Control
37	95–1543	1	Decal–Valve Adjust
41	93–1177	1	Spacer–Pulley

PROTOTYPE



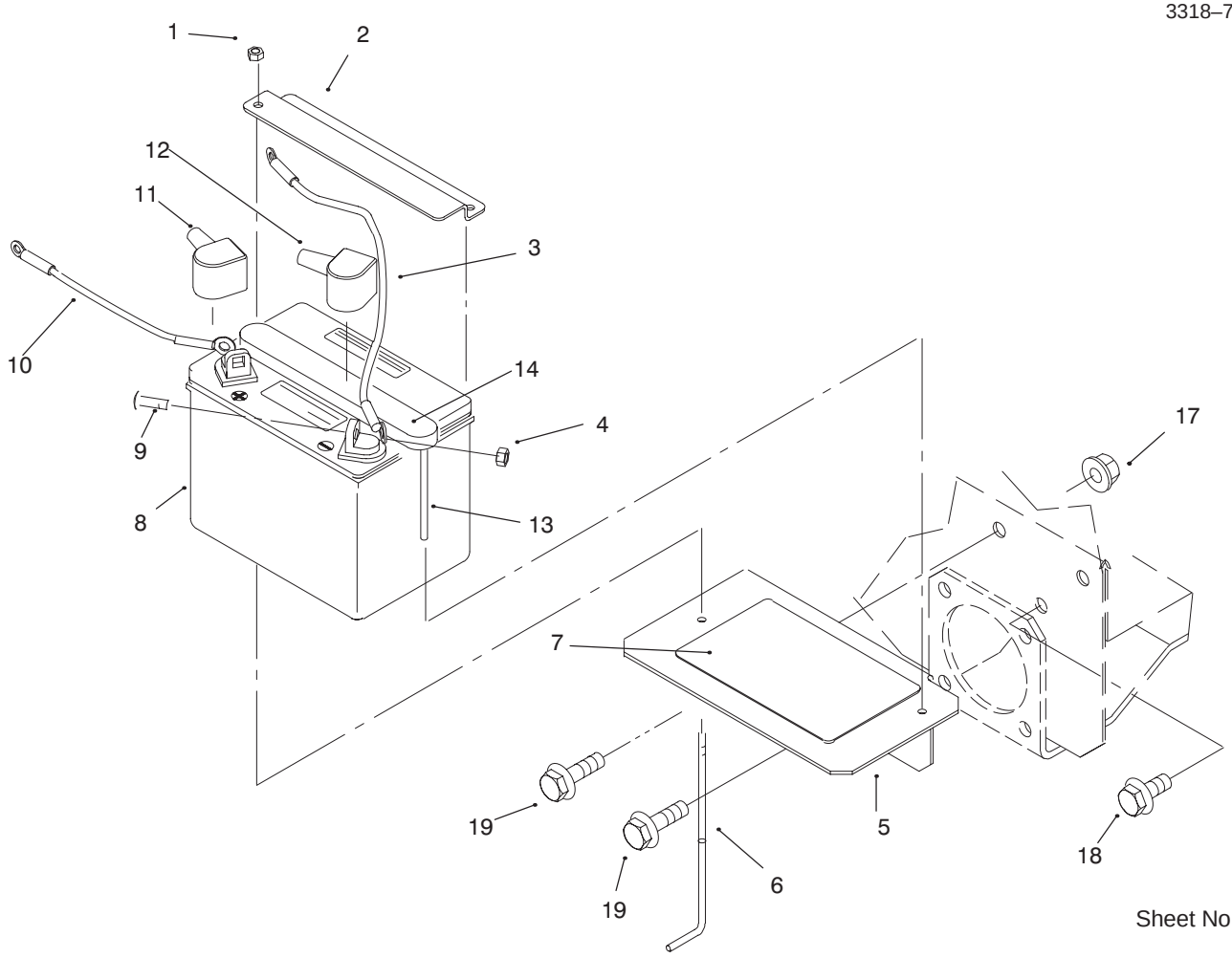
Sheet No.: 9

Hydraulic & Drive System

Ref. No.	Part No.	Qty.	Description
1	82–4550	2	ASM–Hose
2	82–4540	1	ASM–Hose
3	340–4	4	Fitting–Hydraulic
3:1	237–30	4	O–Ring
3:2	237–79	4	O–Ring
4	354–116	2	Fitting–Hydraulic
5	2815–16	1	Fitting–Hydraulic
6	82–4180	1	ASM–Hose
7	82–4170	1	ASM–Hose
8	354–115	2	Fitting–Hydraulic
8:1	237–42	A/R	O–Ring
9	82–4201	1	ASM–Hose
10	2815–15	1	Fitting–Hydraulic
11	76–0200	1	Oil Cap ASM
12	29–0590	1	Screen–Filler
13	95–1532	1	Reservoir–Oil
14	354–118	2	Fitting–Hydraulic
15	82–4190	2	ASM–Hose
16	82–4200	1	ASM–Hose
17	3253–4	3	Washer–Lock
18	322–3	3	Screw–HH
22	82–8230	2	Motor–Wheel
23	340–6	4	Fitting–Hydraulic
23:1	237–80	4	O–Ring
23:2	237–30	4	O–Ring
24	82–4560	1	ASM–Hose

Ref. No.	Part No.	Qty.	Description
25	3257–8	2	Key–Woodruff
26	94–9664	2	ASM–Wheel & Tire
26:1	232–27	2	Valve Stem & Cap Assemby
26:2	242–87	2	Wheel
26:3	231–117	2	Tire–15x6
27	242–50	8	Nut–Lug
28	32112–17	8	Pushnut
29	82–3830	2	Hub–Wheel
30	3213–8	8	Screw–HH
31	325–11	8	Screw–HH
32	3241–5	4	Set Screw
33	95–1528	2	Pulley–Pump
34	82–4110	1	V Belt
35	80–6090	2	Key–Square
36	86–4740–01	2	Spacer–Frame
37	86–4730–01	2	Plate–Frame
38	3296–23	8	Nut–Lock
39	67–8110	2	Filter–Oil
40	354–117	2	Fitting–Hydraulic
40:1	237–79	2	O–Ring
41	86–9080	1	Head–Filter
42	3253–3	2	Washer–Lock
43	321–3	2	Screw–HH

PROTOTYPE



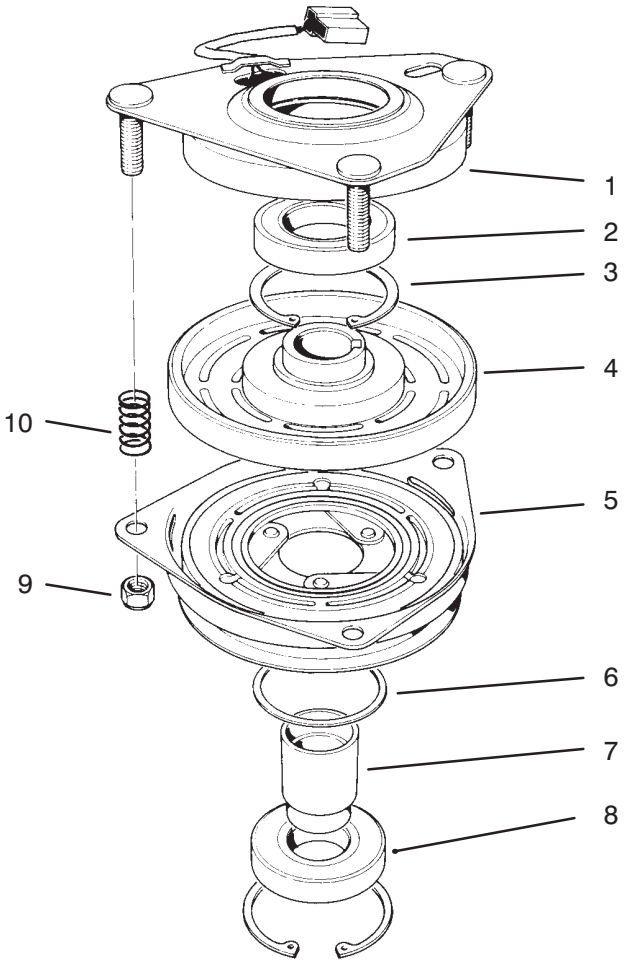
Sheet No.: 10

Battery

Ref. No.	Part No.	Qty.	Description
1	3296–42	2	Nut–Lock
2	82–4620–01	1	Strap–Battery
3	54–3090	1	Wire–ASM
4	32149–1	2	Nut–Keps
5	93–1180–01	1	Plate–Battery
6	12–5950	2	Rod–Support
7	62–4300	1	Pad–Anti Skid
8	82–4640	1	Battery–12 Volt
9	322–3	2	Screw–HH
10	28–3891	1	Wire Red
11	77–0981	1	Boot–Terminal
12	77–0980	1	Boot–Terminal
13	68–3810	1	Tube–Vent
14	84–1830	1	Cap–Battery
17	32128–23	6	Nut–Lock
18	3234–32	4	Screw–HH
19	3234–22	2	Screw–Hfh

Ref. No.	Part No.	Qty.	Description

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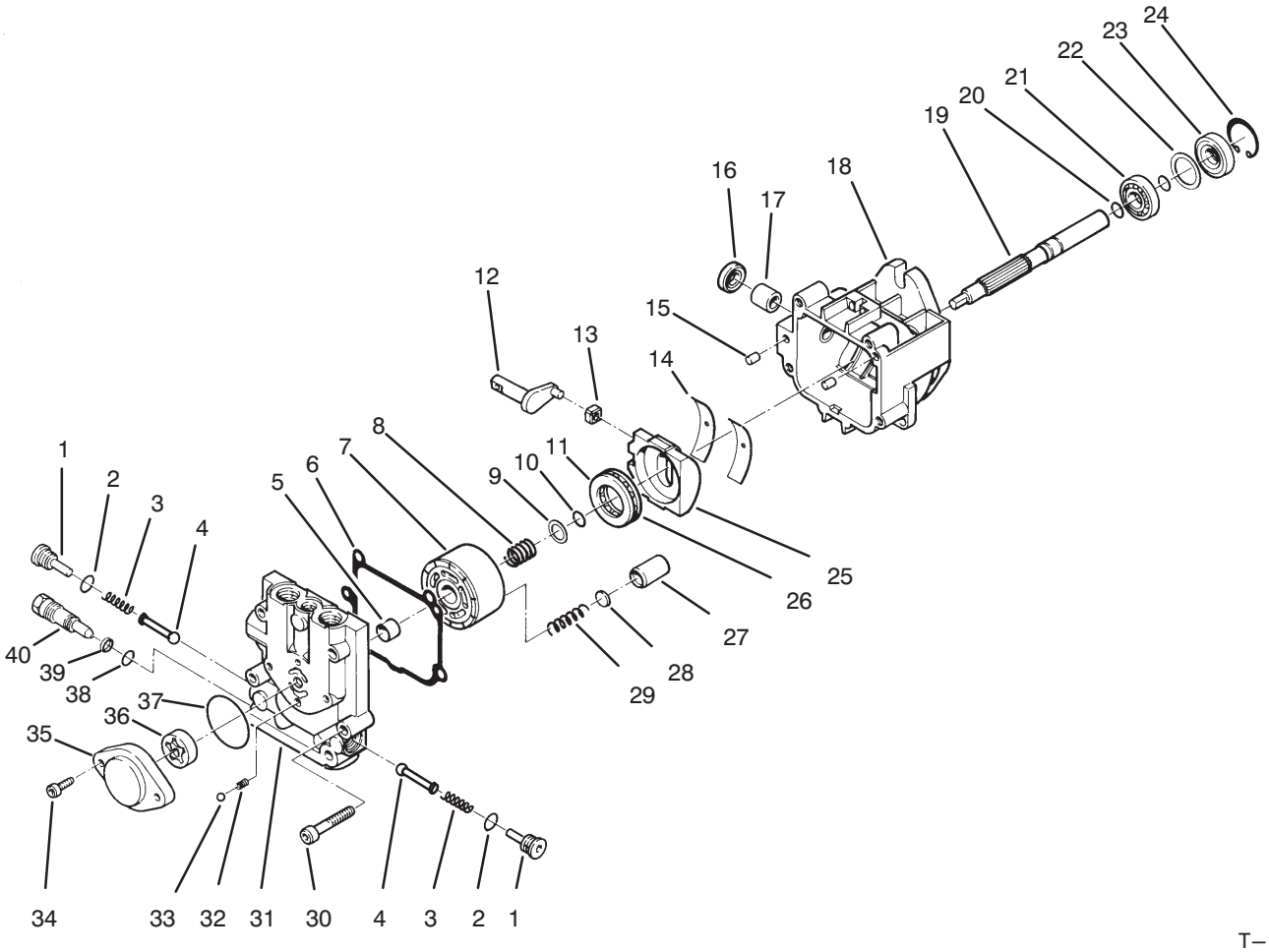
T–0080

Clutch Assembly No. 54–3200

Ref. No.	Part No.	Description	No. Used
1	54–0230	Field Ass'y (Incl. Ref. #2 & 3)	1
2	251–292	Bearing – Field	1
3	44–8310	Ring – Retaining	2
4	44–8360	Field Coil, Rotor & Bearing Assembly (Incl. Ref. #1)	1
5	55–7410	Armature & Pulley Assemble (Incl. Ref. #3,6,7, & 8)	1

Ref. No.	Part No.	Description	No. Used
6	44–8330	Spacer	1
7	44–8340	Collar – Bearing	1
8	251–291	Bearing – Pulley	1
9	3296–5	Nut – Lock	3
10	44–8320	Spring	3

PROTOTYPE



T–1236

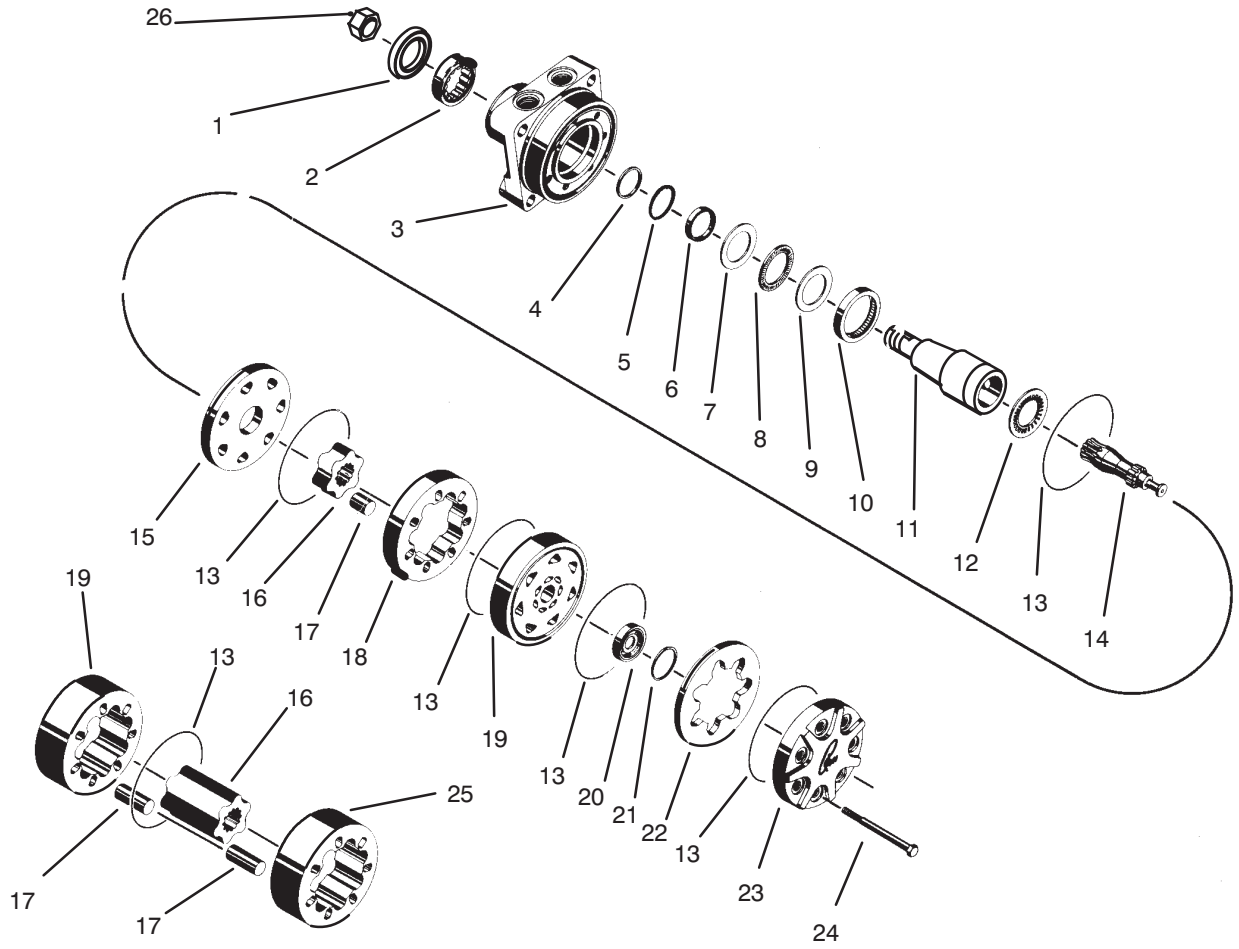
Hydraulic Pump Assembly No. 95–1538

Ref. No.	Part No.	Description	No. Used
1	80–6120	Check Valve Kit (Incl. Ref. #2–4)	1
2		Seal – O–Ring	2
3		Spring	2
4		Poppet	2
5		Journal – Bearing	1
6		Gasket – End Cap	1
7		Cylinder Block Kit (Incl. Ref. #8–10 & 27–29)	1
8		Spring	1
9		Washer	1
10		Ring – Retaining	1
11		Plate – Thrust	1
12		Arm – Trunnion	1
13		Guide – Slot	1
14		Cradle – Bearing	2
15		Pin	2
16		Seal – Lip	1
17		Journal – Bearing	1
18		Housing – Assembly (Incl. Ref. #16 & 17)	1
19		Shaft	1
20		Ring – Retaining	2
21		Bearing – Ball	1
22		Spacer	1

Ref. No.	Part No.	Description	No. Used
23		Seal – Lip	1
24		Ring – Retaining	1
25		Swashplate Assembly	1
26		Roller – Thrust	1
27		Piston	5
28		Washer – Thrust	5
29		Spring – Piston	5
30		Screw	4
31		End Cap Assembly (Incl. Ref. #5)	1
32		Ball	1
33		Spring	1
34		Screw	2
35		Housing – Charge Pump	1
36		Gerotor Assembly	1
37		Seal – O–Ring	1
38		Seal – O–Ring	1
39		Ring – Back–Up	1
40		Valve – Bypass	1
*	80–6110	Charge Relief Valve Kit (Incl. Ref. #32–33)	1
*	80–6130	Overhaul Seal Kit (Incl. Ref. #6, 10, 16, 20, 23 & 37–39)	1

*Not Illustrated

PROTOTYPE



C–0737

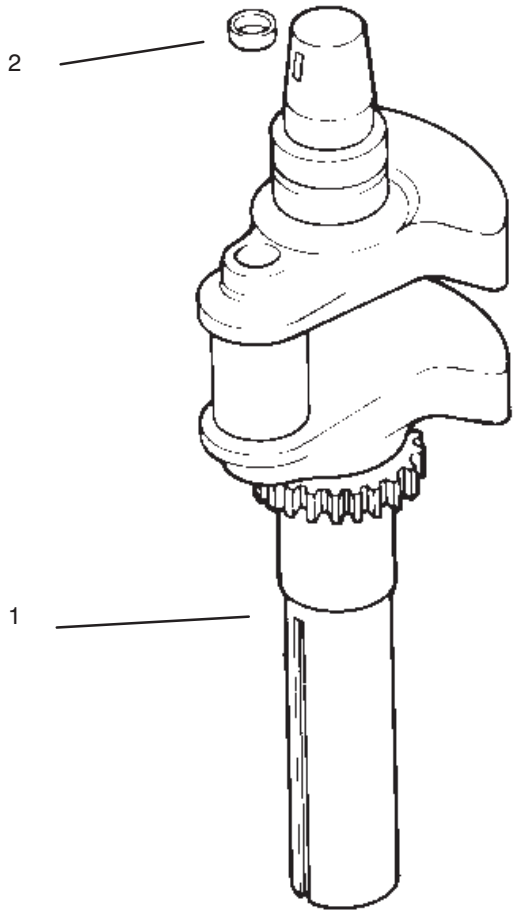
Traction Drive Motor (Torqumotor

Ref. No.	Part No.	Description	No. Used
1		Seal	1
2		Bearing	1
3		Housing	1
4		Washer – Back Up	1
5		Washer – Back Up	1
6		Seal	1
7		Washer – Thrust	1
8		Bearing – Thrust	1
9		Washer – Thrust	1
10		Bearing – Inner	1
11		Coupling – Shaft	1
12		Bearing – Thrust	1
13		”O”Ring	5
14		Link – Drive	1

Ref. No.	Part No.	Description	No. Used
15		Plate Wear	1
16		Rotor	1
17		Vane	7
18		Stator	
19		Manifold	1
20		Commutator	1
21		Seal – Commutator	1
22		Commutator – Ring	1
23		Cover – End	1
24		Bolt – Special	A/R
25		Stator Half	
26	85–7310	Nut	1
*	85–7320	Kit – Seal	
		(Incl. Ref. #1,4,6,13 & 20)	1

PROTOTYPE

*Not Illustrated



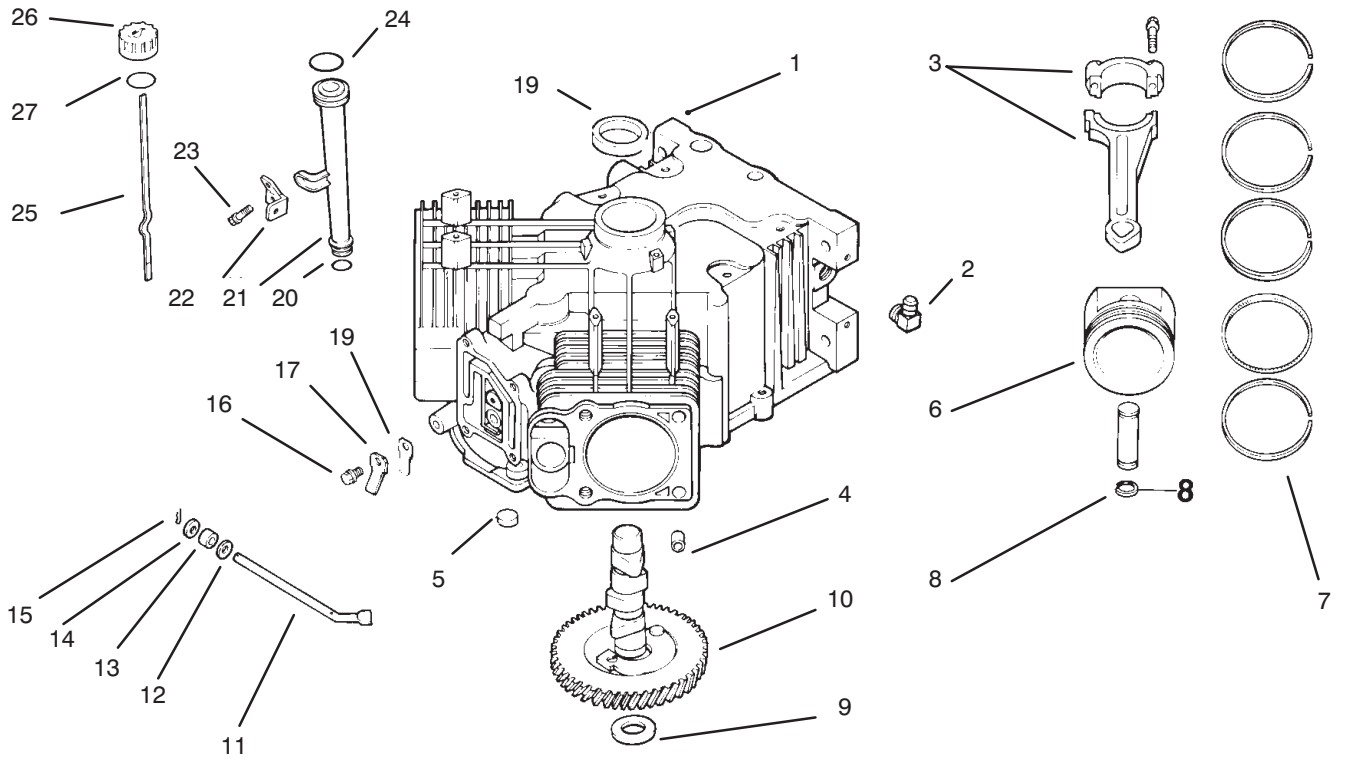
C−2159

Crankshaft

Ref. No.	Part No.	Description	No. Used
1	Crankshaft		
1	24 014 80	Crankshaft	1

Ref. No.	Part No.	Description	No. Used
2	52 139 09	Plug − Cup	

PROTOTYPE



C–2160

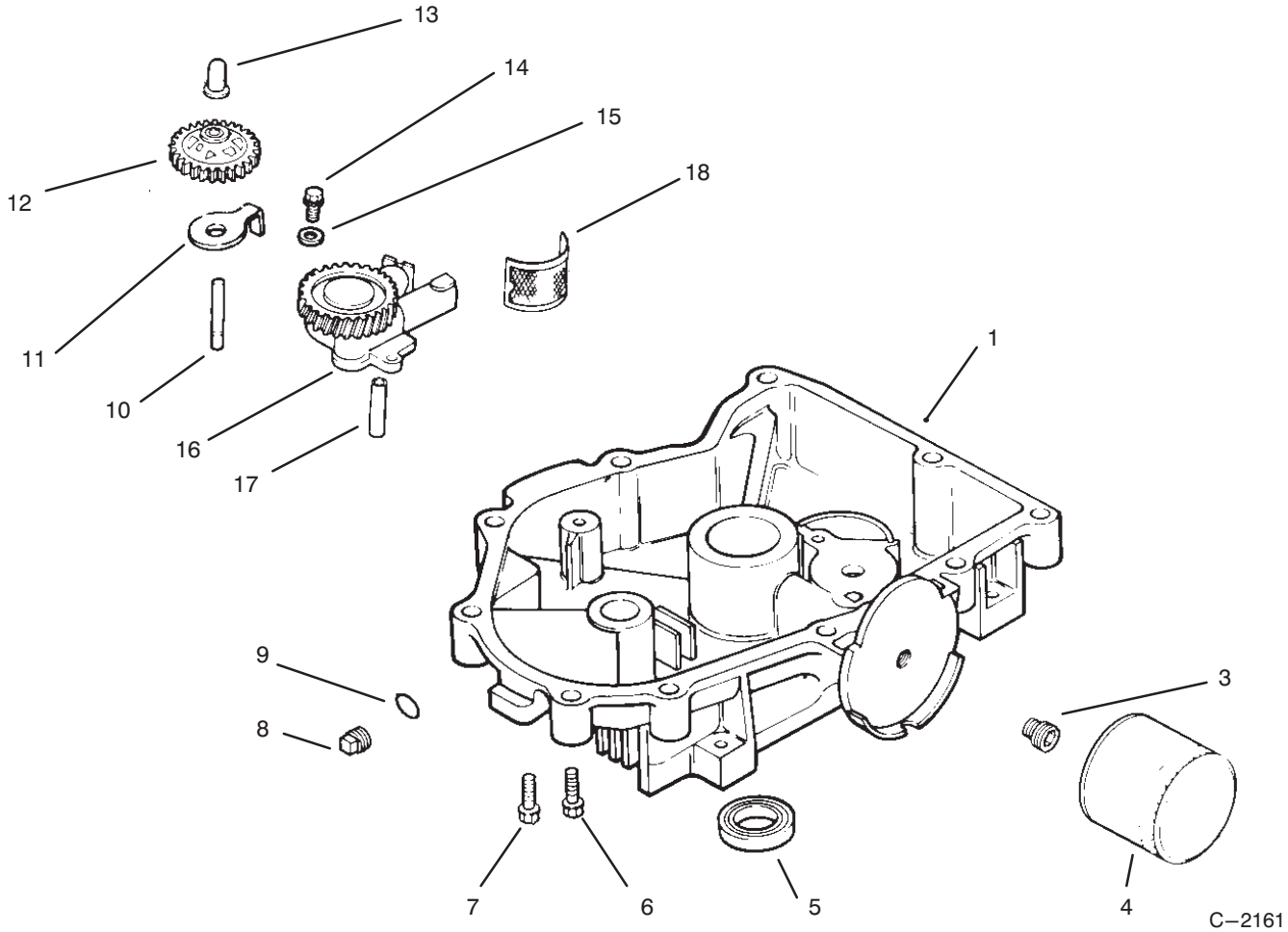
Crankcase

Ref. No.	Part No.	Description	No. Used
1	24 782 05	Cylinder Block	1
2	24 294 03	Fitting	1
3	24 067 05	Rod – Connecting (Std)	2
*	24 067 06	Rod – Connecting (.25)	2
4	12 380 03	Pin – Locating	6
5	52 139 09	Plug – Cup	1
6	24 874 01	Set – Piston w/Ring (Incl. Ref. #7–8)	2
*	24 874 02	Set – Piston w/Ring (.25) (Incl. Ref. #7–8)	2
*	24 874 03	Set – Piston w/Ring (.50) (Incl. Ref. #7–8)	2
7	24 108 01	Set – Ring (Std)	2
*	24 108 02	Set – Ring (.25)	2
*	24 108 03	Set – Ring (.50)	2
8	24 018 01	Retainer – Piston Pin	4
9	12 422 09	Shim – Camshaft (Green)	A/R
*	12 422 13	Shim – Camshaft (Black)	A/R
*	12 422 07	Shim – Camshaft (White)	A/R
*	12 422 08	Shim – Camshaft (Blue)	A/R
*	12 422 10	Shim – Camshaft (Yellow)	A/R
*	12 422 11	Shim – Camshaft (Red)	A/R

Ref. No.	Part No.	Description	No. Used
*	12 422 12	Shim – Camshaft (Gray)	A/R
10	24 012 05	Camshaft	1
11	24 144 01	Shaft – Governor Cross	1
12	X–25–63	Washer	1
13	12 032 01	Seal – Governor Cross	1
14	X–25–102	Washer	1
15	12 380 04	Pin – Hitch	1
16	M–0545010	Screw	2
17	24 018 04	Retainer – Reed	2
18	24 402 05	Reed – Breather	2
19	24 032 01	Seal – Oil	1
20	12 153 01	"O"Ring	1
21	12 123 04	Tube – Oil Fill	1
22	24 126 19	Bracket – Fill Tube	1
23	SM–0549016	Screw	1
24	12 153 02	"O"Ring	1
25	24 038 04	Dipstick Assembly (Incl. Ref. # 26–27)	1
26	25 755 13	Kit – Fill Cap (Incl. Ref. # 27)	1
27	12 153 03	"O"Ring	1

PROTOTYPE

3318—705



C—2161

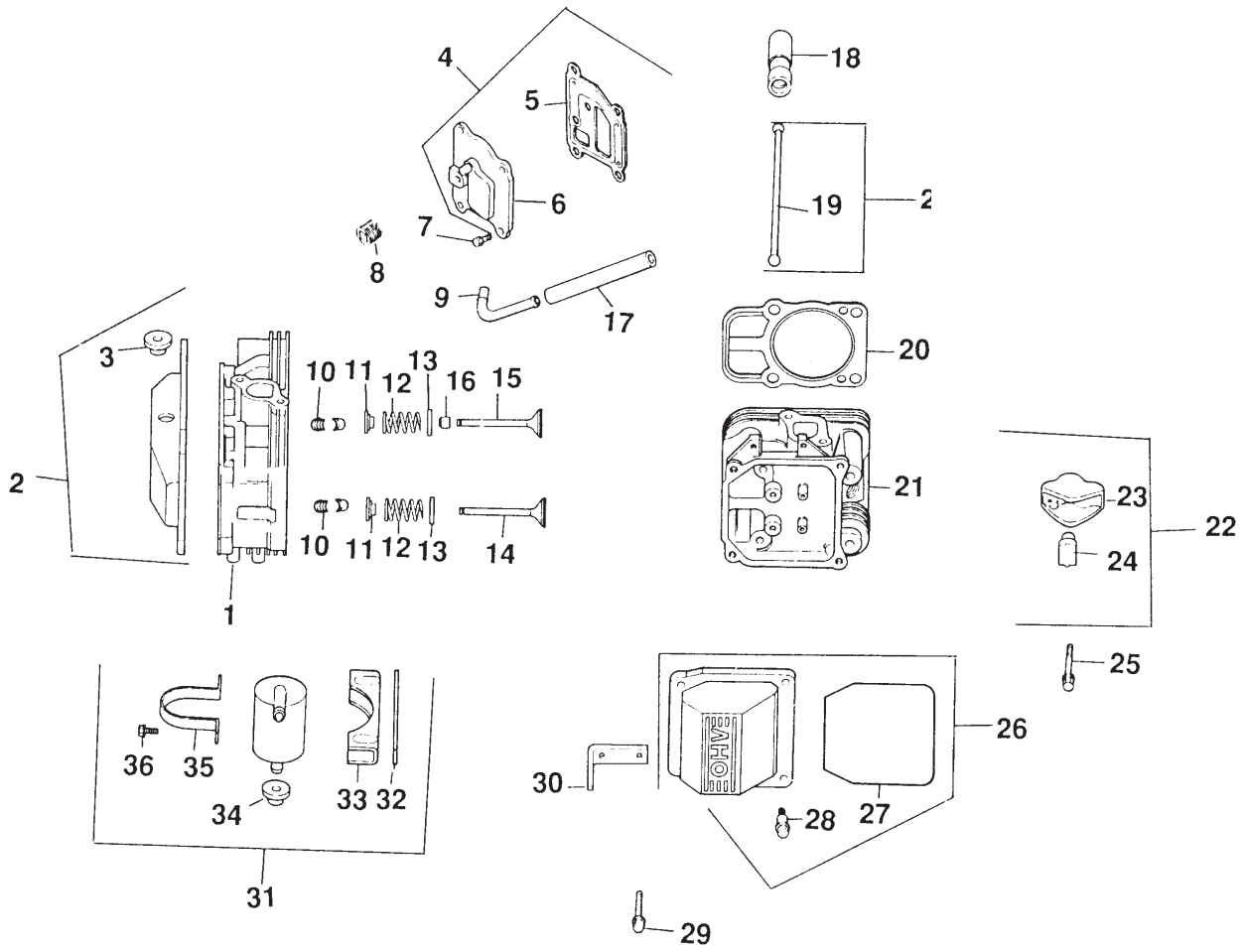
Oil / Pan Lubrication

Ref. No.	Part No.	Description	No. Used
1	24 199 07	Pan — Oil	1
3	24 136 01	Nipple — Oil Filter	1
4	12 050 01	Filter — Oil	1
5	52 032 08	Seal — Oil	1
6	24 086 17	Screw	1
7	24 086 16	Screw	9
8	X—75—10	Plug	1
9	24 153 08	”O”Ring	1
10	12 144 02	Shaft — Governor Gear	1
11	52 448 02	Tab — Locking	1

Ref. No.	Part No.	Description	No. Used
12	24 043 12	Kit — Governor Gear (Incl. Ref.#13)	1
13	12 380 01	Pin — Governor Regulating	1
14	M—645025	Screw	2
15	M—0631005	Washer	2
16	24 393 08	Oil Pump Assembly (Incl. Ref.#17)	1
17	24 123 05	Tube — Oil Pickup	1
18	25 162 07	Screen — Oil	1

PROTOTYPE

*Not Illustrated



Head / Valve / Breather

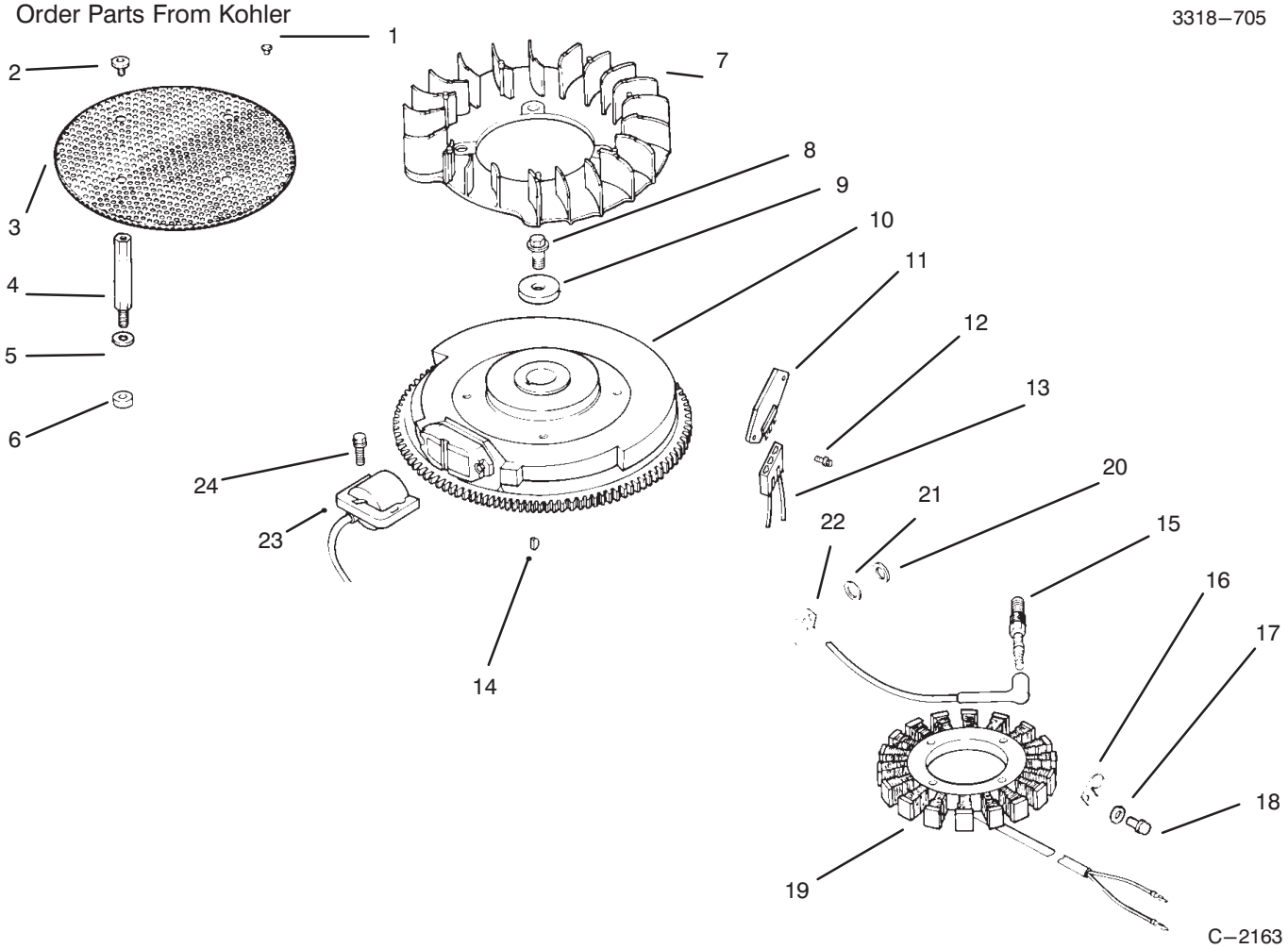
Ref. No.	Part No.	Description	No. Used
1	24 318 11	Head Asm. # 1 Cyl.	1
2	24 755 76	Kit − Valve Cover/Breather (Incl. Ref.# 3 & 27−28)	1
4	24 033 03	Kit − Breather Cover Gasket (Incl. Ref.#5−6)	1
3	25 313 02	Grommet − Rubber	1
5	24 041 23	Gasket − Breather	1
6	24 096 15	Cover − Breather	1
7	M−0645020	Screw	4
8	X−75−23	Plug	1
9	24 294 01	Fitting	1
10	12 755 03	Kit − Retaining	4
11	12 173 01	Cap − Valve Spring	4
12	24 089 02	Spring − Valve	4
13	235011	Retainer − Spring	4
14	24 016 01	Valve − Exhaust (Std)	2
*	24 016 02	Valve − Exhaust (.25)	2
15	24 017 01	Valve − Intake (Std)	2
*	24 017 02	Valve − Intake (.25)	2
16	24 032 05	Seal − Valve Stem	2
17	24 326 03	Hose	1
18	12 351 01	Lifter − Valve	4

Ref. No.	Part No.	Description	No. Used
19	24 411 05	Rod − Push	4
20	24 041 08	Gasket − Cylinder Head	2
22	24 755 66	Kit − Valve Train (Incl. Ref.#19 & 23−24)	1
21	24 318 12	Head Assembly # 2 Cyl.	1
23	24 186 01	Arm − Rocker	4
24	24 599 01	Pivot − Rocker Arm	4
25	M−0640034	Screw	4
26	24 755 74	Kit − Valve Cover (Incl. Ref. # 27−28)	1
27	24 153 11	”O”Ring	1
28	24 086 32	Screw	4
29	12 086 16	Screw	8
30	24 445 01	Strap − Lifting	1
*31	24 755 57	Kit − Breather Separator (Incl. Ref. # 32−36)	1
32	24 112 12	Spacer	1
33	24 126 44	Bracket	1
34	24 313 02	Grommet − Rubber	1
35	24 445 02	Strap − Brerather	1
36	SM−0545016	Screw	2

PROTOTYPE

*Not Illustrated

3318–705



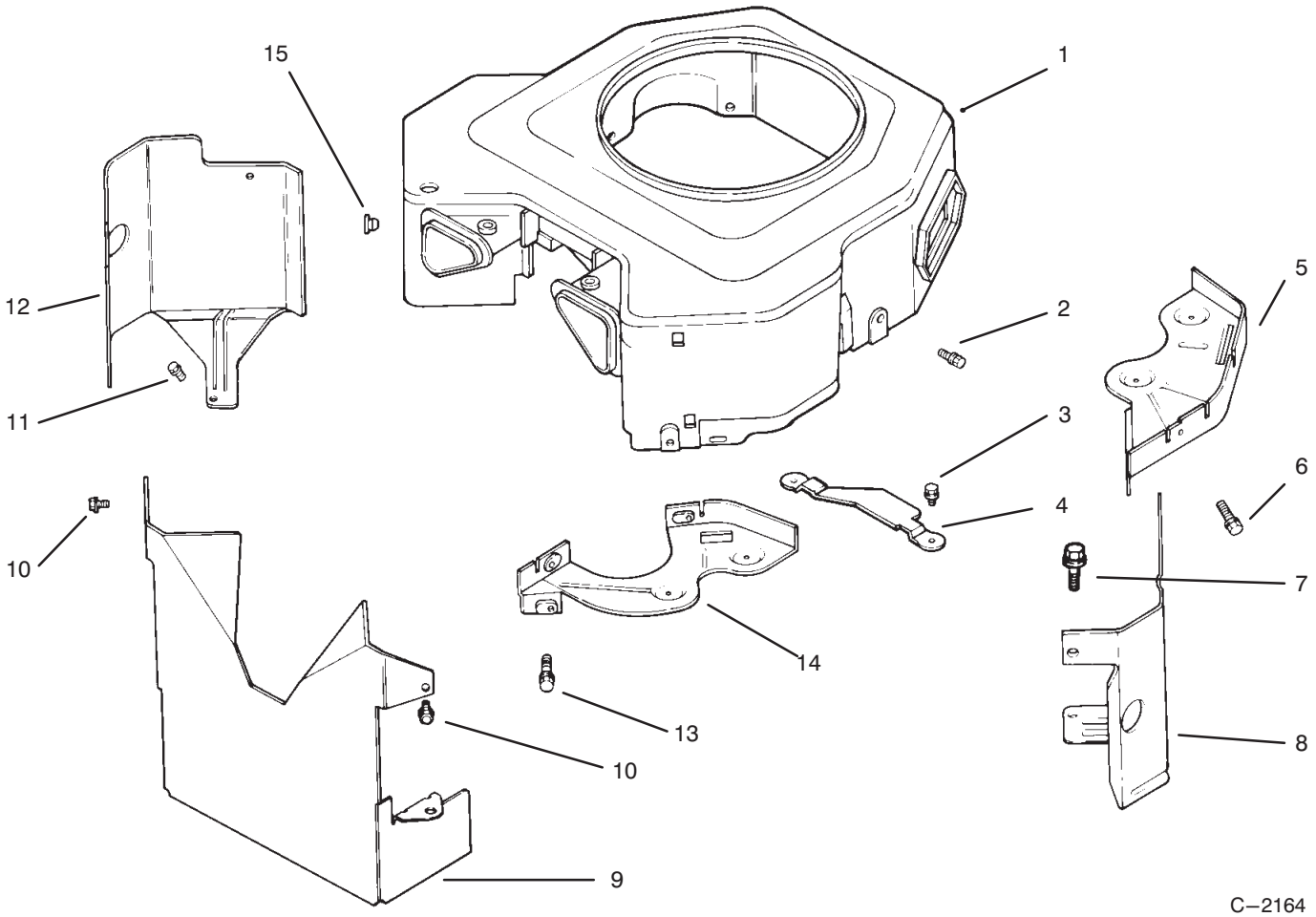
Ignition / Electrical

Ref. No.	Part No.	Description	No. Used
1	25 086 43	Screw – Set	1
2	M–657010	Screw	4
3	24 162 20	Screen – Grass	1
4	24 072 01	Stud	4
5	X–25–53	Washer	8
6	12 112 01	Spacer – Fan	4
7	24 157 01	Fan	1
8	12 086 14	Screw	1
9	12 468 03	Washer	1
10	24 025 04	Flywheel Assembly	1
11	25 403 03	Rectifier – Regulator	1
12	24 086 18	Screw	2
13	236602	Connector	1

Ref. No.	Part No.	Description	No. Used
14	X–42–15	Key	1
15	12 132 02	Spark Plug	2
16	48 154 02	Clip – Cable	1
17	X–25–63	Washer	1
18	M–0548025	Screw	2
19	24 085 01	Stator – 15 amp	1
20	X–25–92	Washer	2
21	X–25–63	Washer	1
22	235173	Clip – Cable	1
23	24 584 01	Module – Ignition	2
24	SM–0545020	Screw	4
*	24 176 40	Harness – Wiring	1
	24 518 04	Lead – Green	1

PROTOTYPE

*Not Illustrated



Blower Housing & Baffles

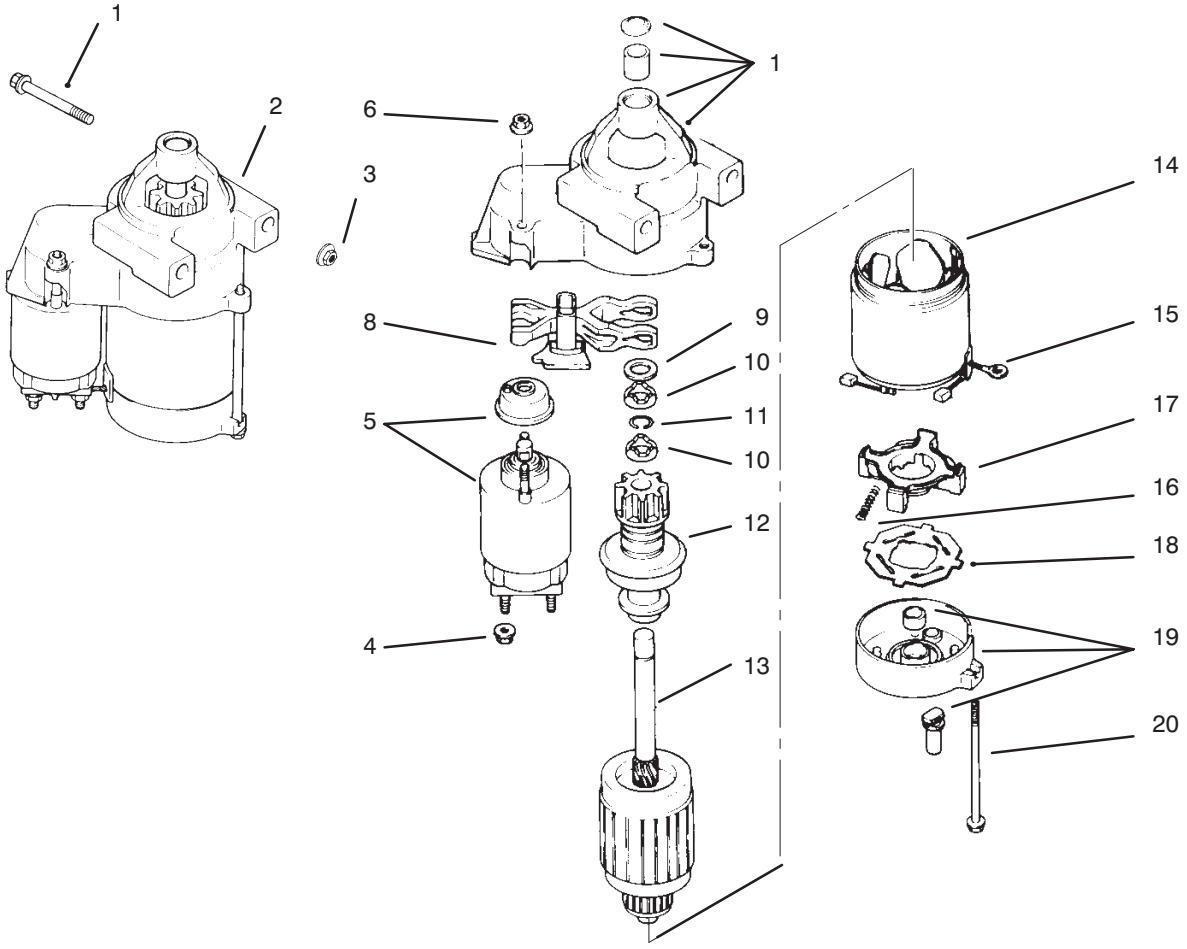
Ref. No.	Part No.	Description	No. Used
1		Housing − Blower	1
2		Screw	3
3	SM−0545016	Screw	4
4	24 314 05	Guard − Flywheel	1
5	24 146 02	Plate − Backing # 2 Side	1
6	SM−0545020	Screw	2
7	M−0551016	Screw	1
8	24 063 20	Baffle Cyl. Barrel # 2 Side	1

Ref. No.	Part No.	Description	No. Used
9	24 063 29	Baffle − Valley	1
10	M−0549010	Screw	2
11	M−0549016	Screw	2
12	24 063 19	Baffle Cyl. Barrel # 1 Side	1
13		Screw	2
14	24 146 08	Plate − Backing # 1 Side	1
15	24 100 02	Nut − Plastic	2
*	24 113 12	Decal − Horse Power	1

PROTOTYPE

* Not Illustrated

3318−705



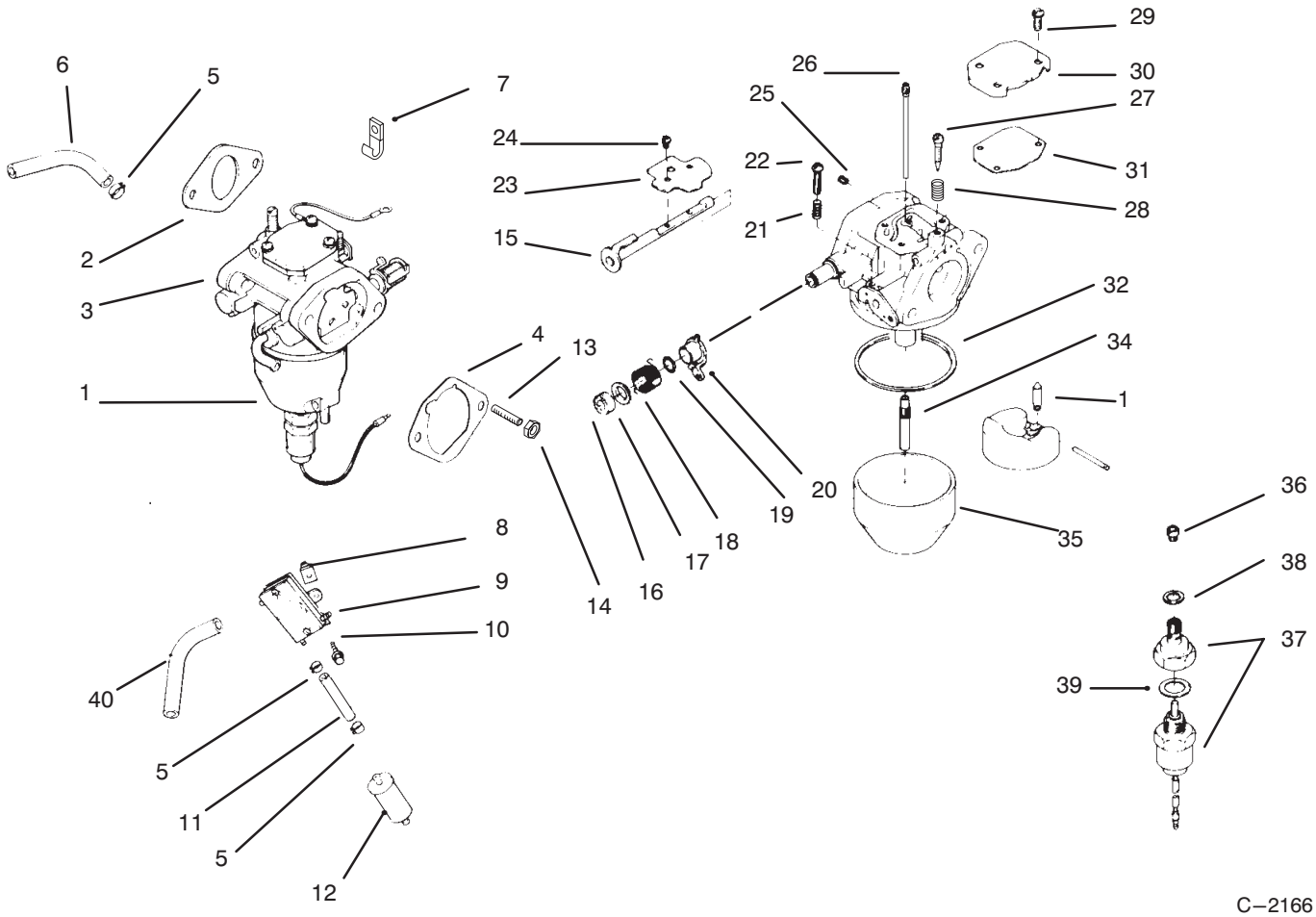
C−2165

Starter System

Ref. No.	Part No.	Description	No. Used
1	M−0839080	Screw	2
2	12 098 03	Starter Solenoid Shift (Incl. Ref. #4−20)	1
3	M−0841080	Nut	1
4	52 100 10	Nut	2
5	12 081 02	Cap − Drive End	1
6	52 100 09	Nut	1
7	52 435 02	Solenoid	1
8	12 090 10	Lever − Starter Drive	1
9	24 755 84	Washer	1
10	52 100 08	Nut	2

Ref. No.	Part No.	Description	No. Used
11	52 141 03	Ring − Retaining	1
12	12 239 01	Pinion − Drive	1
13	12 170 03	Armature − Starter	1
14	12 471 01	Frame	1
15	52 221 01	Kit − Brush (Incl. Ref. #16)	1
16	52 089 09	Spring − Brush	4
17	52 323 03	Holder − Brush	1
18	52 168 01	Insulator	1
19	12 301 01	Cap − Commutator End	1
20	52 211 05	Bolt	2

PROTOTYPE



Carburetor / Fuel Pump

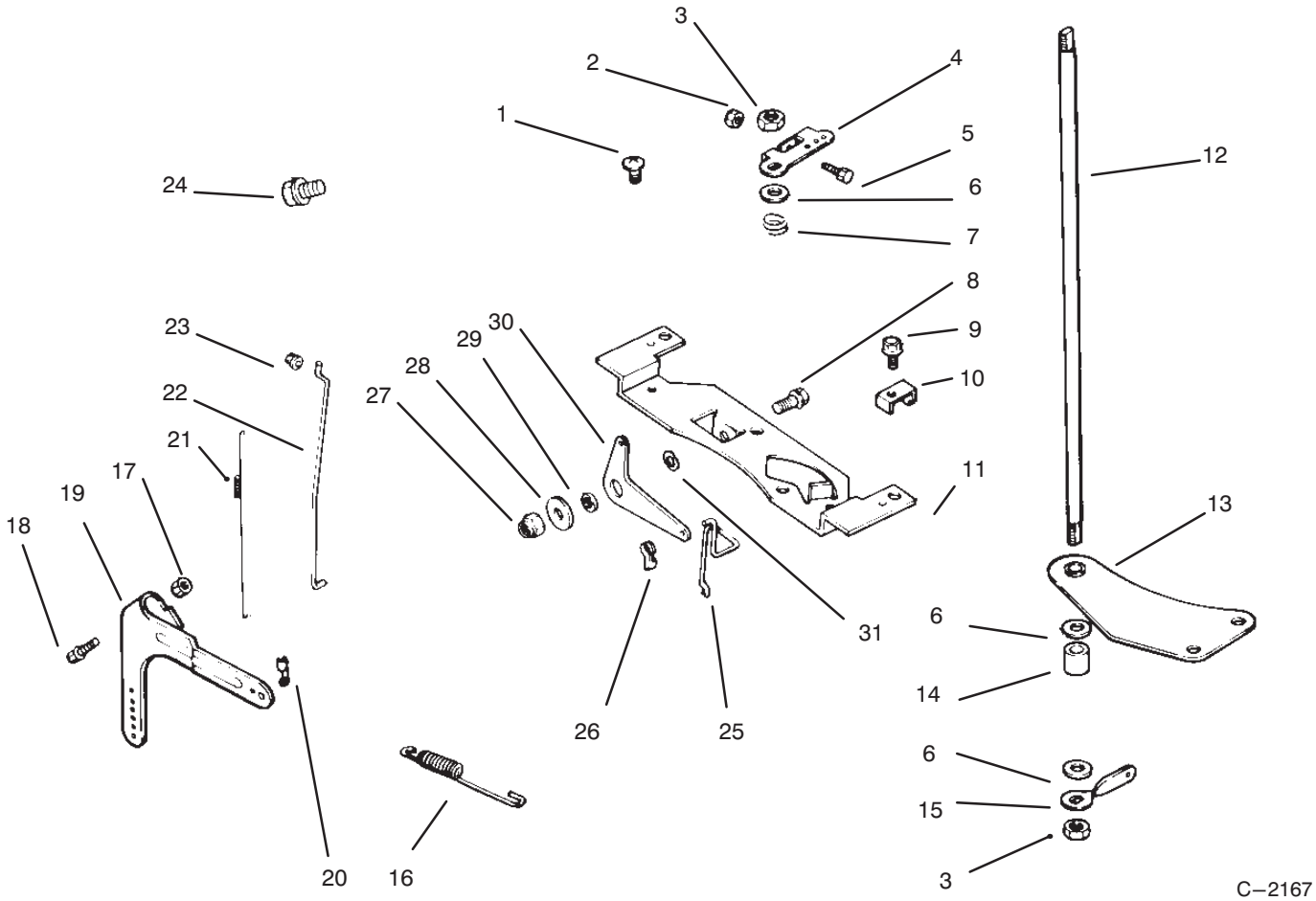
Ref. No.	Part No.	Description	No. Used
1	24 853 17	Kit – Carburetor / w Gasket (Incl. Ref.#2–4)	1
2	24 041 15	Gasket – Carburetor	1
3	24 053 17	Carburetor (Ref. Only) (Inc. Ref. 15–39)	1
4	24 041 14	Gasket – Air Cleaner	1
5	X–426–9	Clamp – Hose	6
6	52 353 22	Line – Fuel 12”	2
7	47 154 01	Clip – Cable	1
8	24 100 01	Nut – Plastic	2
9	24 393 04	Pump – Fuel	1
10	24 086 12	Screw	2
11	24 353 03	Line – Fuel 10.5”	1
12	25 050 03	Filter – Fuel	1
13	M–0629128	Stud	2
14	M–0641060	Nut	2
15	24 144 15	Shaft – Choke	1
16	24 468 05	Washer	1
17	24 241 01	Collar – Coke	1
18	24 089 22	Spring – Choke Return	1
19	24 141 04	Ring – Choke Lever	1
20	24 090 10	Lever – Choke	1
21	24 089 24	Spring – Throttle Adjust	1
22	24 086 19	Screw – Throttle Adjust	1
23	24 462 13	Plate – Choke	1

Ref. No.	Part No.	Description	No. Used
24	24 086 20	Screw	4
25	24 337 27	Jet – Air Bleed	1
26	24 337 11	Jet – Slow	1
27	24 086 22	Screw	1
28	24 089 23	Spring – idler Screw	1
29	24 086 21	Screw	3
30	24 096 13	Cover – Passage	1
31	24 041 18	Gasket – Passage Cover	1
32	24 041 19	Gasket – Float Chamber	1
*33	24 757 05	Kit – Float Repair	1
34	24 369 01	Nozzle – Main	1
35	24 234 01	Chamber – Float	1
36	24 337 20	Jet – Main	1
37	24 755 15	Kit – Solenoid Valve (Incl. Ref. #38–39)	1
38	24 041 21	Gasket – Chamber Screw	1
39	24 041 20	Gasket – Solenoid	1
*	24 041 15	Gasket – Carburetor	1
*	24 755 25	Kit – High Altitude (1500–3000 Meters)	1
*	24 755 26	Kit – High Altitude (over 3000 Meters)	1
*	24 757 06	Kit – Carburetor Repair	1
40	15 353 04	Line – Fuel 11.5”	1

PROTOTYPE

* Not Illustrated

3318–705



C–2167

Engine Controls

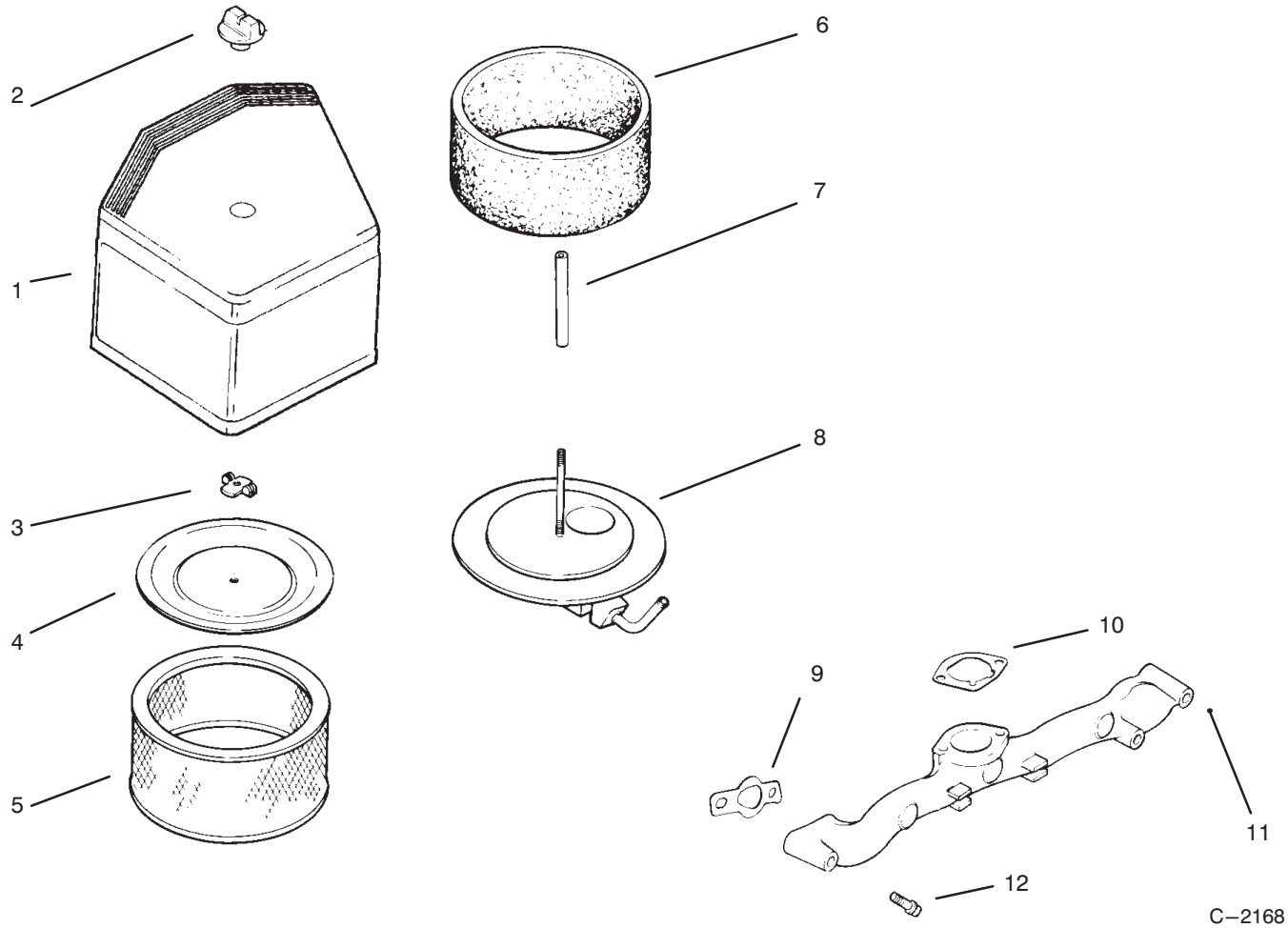
Ref. No.	Part No.	Description	No. Used
1	24 086 06	Screw	2
2	M–0446030	Nut	1
3	M–0647060	Nut	2
4	24 090 09	Lever – Throttle Control	1
5	M–0401030	Screw	1
6	X–25–72	Washer	3
7	24 089 20	Spring – Throttle Shaft	1
8	M–0639016	Screw	1
9	SM–054016	Screw	1
10	12 237 01	Clamp – Cable	2
11	24 126 47	Bracket – Control	1
12	24 144 11	Shaft – Throttle	1
13	24 126 17	Bracket – Throttle Shaft	1
14	24 122 10	Spacer	1
15	24 090 12	Lever – Throttle Control	1
16	24 089 18	Spring – Governor	1

Ref. No.	Part No.	Description	No. Used
17	M–0641060	Nut	1
18	SM–0642025	Screw	1
19	24 090 14	Lever – Governor	1
20	25 158 11	Bushing – Throttle	1
21	24 089 01	Spring – Linkage	1
22	24 079 04	Linkage – Throttle	1
23	25 158 10	Bushing – Linkage	1
24	SM–0645016	Screw	2
25	24 079 10	Linkage – Choke	1
26	25 158 11	Bushing – Throttle	1
27	M–0647060	Nut	1
28	X–25–52	Washer	1
29	25 431 01	Spacer	1
30	24 090 20	Lever – Choke	1
31	277341	Washer	1

PROTOTYPE

*Not Illustrated

3318–705



Air Cleaner Filtration

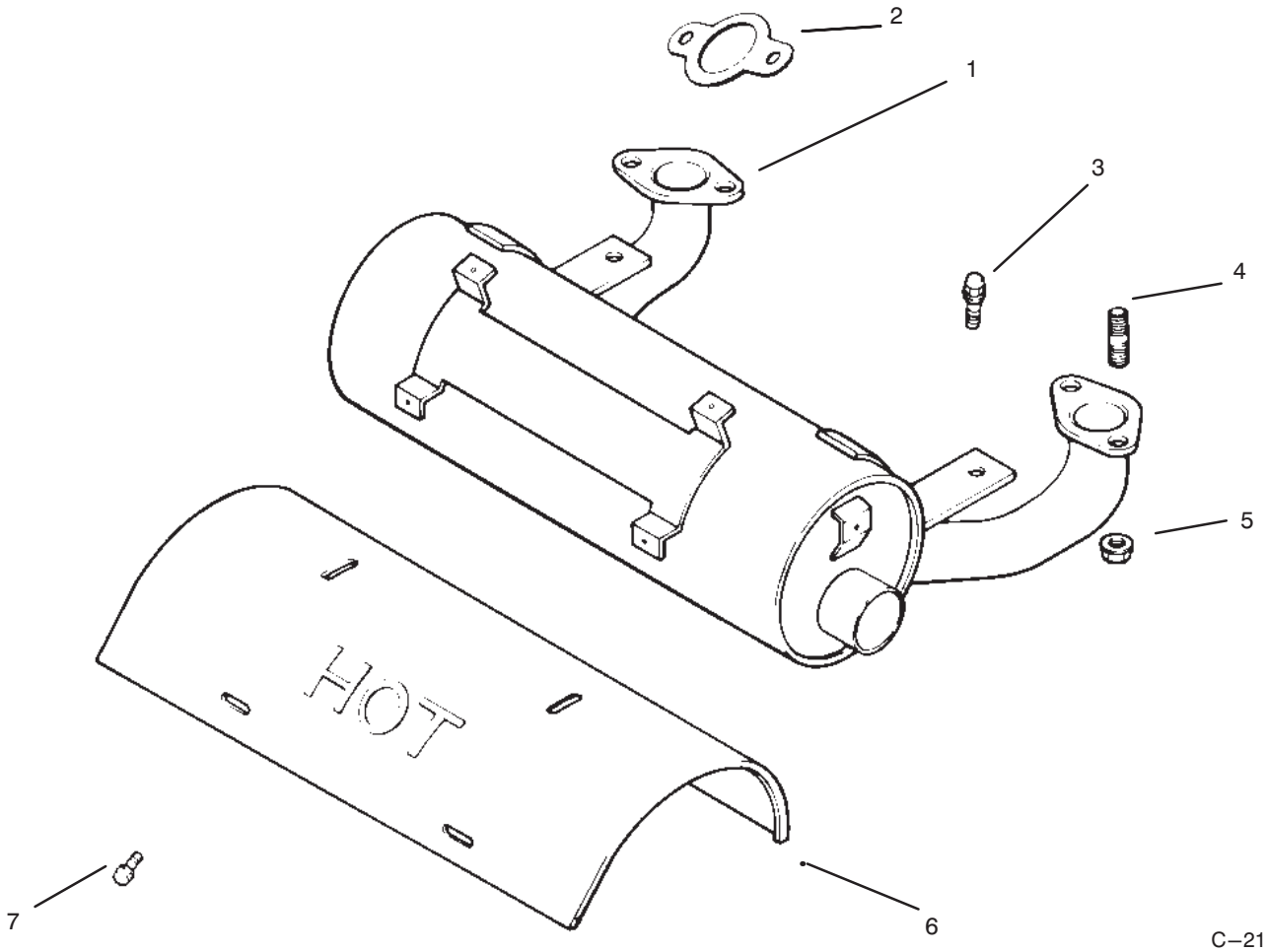
Ref. No.	Part No.	Description	No. Used
1	24 743 10	Kit – Air Cleaner Cover (Incl. Ref.# 2)	1
2	25 341 02	Knob – Cover	1
3	12 100 01	Nut – Wing	1
4	52 082 04	Cover – Element	1
5	45 083 01	Element – Precleaner	1
6	45 083 02	Element	1

Ref. No.	Part No.	Description	No. Used
7	24 032 04	Seal	1
8	24 054 02	Elbow – Air Cleaner	1
11	24 164 06	Manifold – Intake	1
12	M–0639055	Screw	4
9	24 041 01	Gasket – intake Manifold	2
10	24 041 14	Gasket – Air Cleaner Base	1
*	24 113 14	Decal – Maintenance	1

PROTOTYPE

*Not Illustrated

3318–705



C–2169

Exhaust

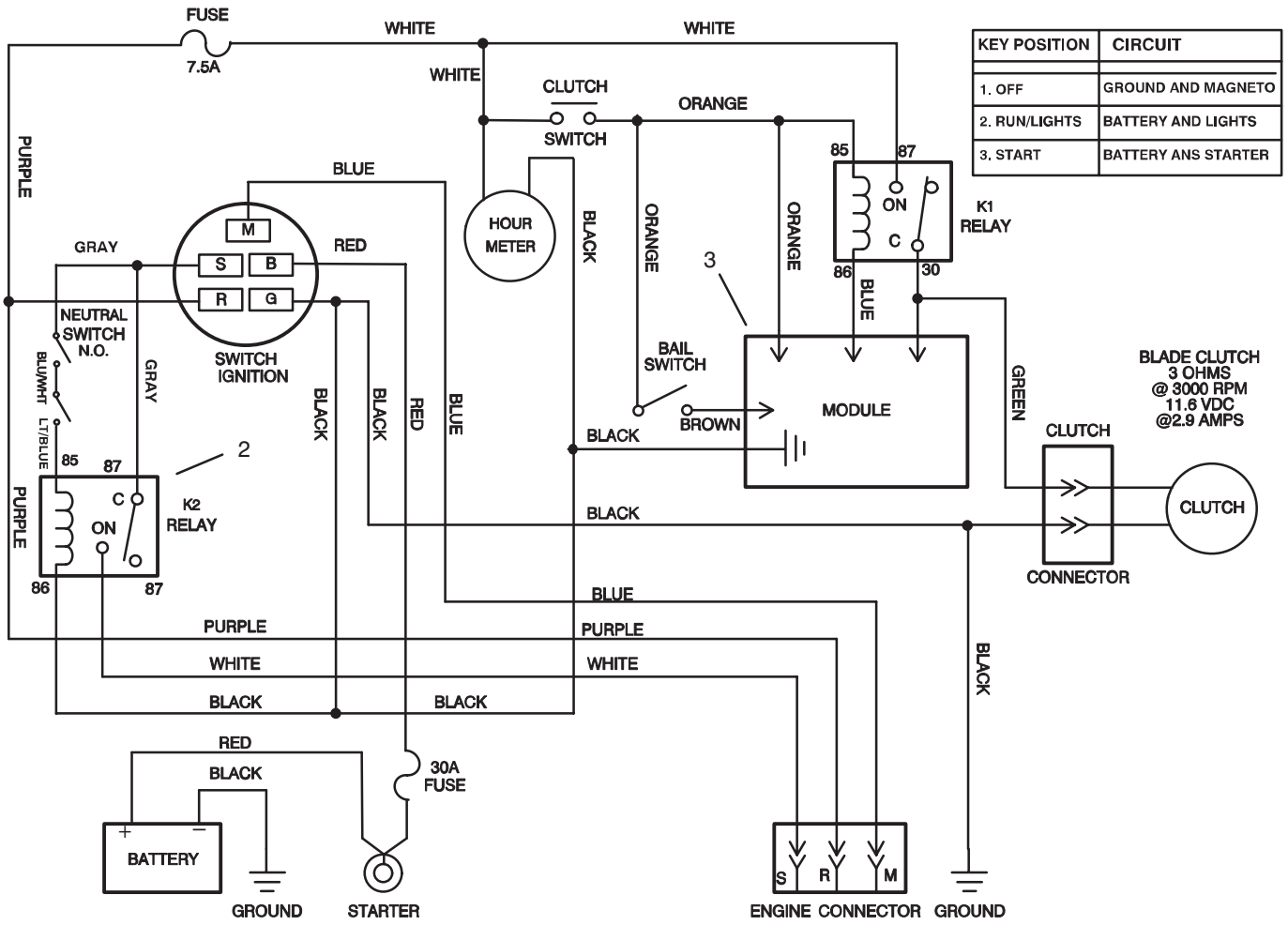
Ref. No.	Part No.	Description	No. Used
1	24 068 08	Muffler	1
2	24 041 02	Gasket – Exhaust	2
3	SM–0645020	Screw	2
4	M–0829033	Stud	4
5	M–0841080	Nut	4

Ref. No.	Part No.	Description	No. Used
6	24 281 07	Duct – Heat Shield	1
7	25 086 40	Screw	4
*	24 782 05	Miniblock	1
*	24 755 03	Gasket Set	1

PROTOTYPE

*Not Illustrated

3318−705



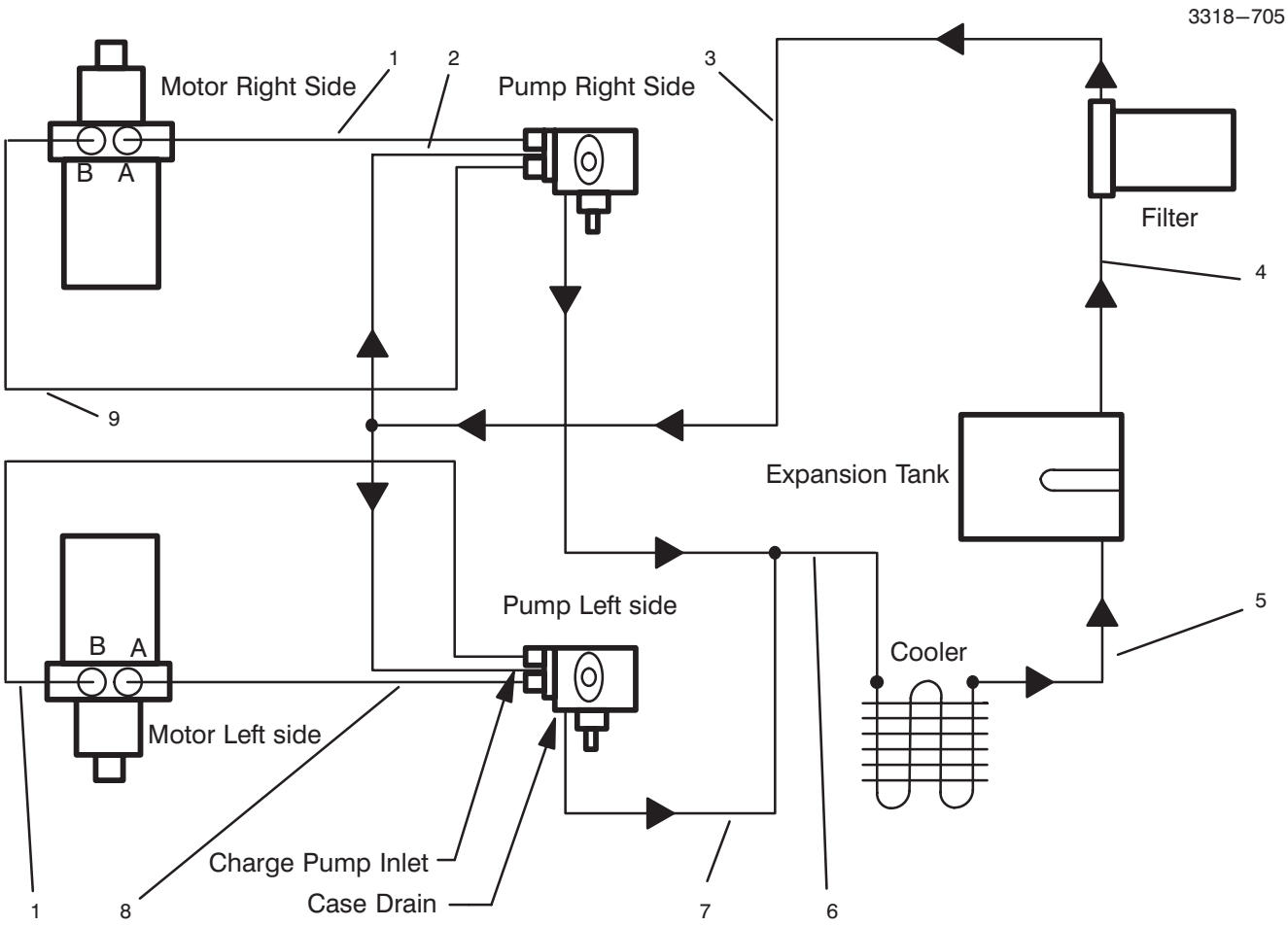
KEY POSITION	CIRCUIT
1. OFF	GROUND AND MAGNETO
2. RUN/LIGHTS	BATTERY AND LIGHTS
3. START	BATTERY ANS STARTER

Electric Schematic

Ref. No.	Part No.	Description	No. Used
1	93−1175	Wire Harness	1
2	63−7590	Relay	1
3	86−7910	Module − Interlock	1

Ref. No.	Part No.	Description	No. Used

PROTOTYPE



C–0708

Hydraulic Schematic

Ref. No.	Part No.	Description	No. Used
1	82–4550	Hose Assembly	2
2	82–4170	Hose Assembly	1
3	82–4180	Hose Assembly	1
4	82–4200	Hose Assembly	1
5	82–4193	Hose Assembly	1

Ref. No.	Part No.	Description	No. Used
6	82–4192	Hose Assembly	1
7	82–4201	Hose Assembly	1
8	82–4560	Hose Assembly	1
9	82–4540	Hose Assembly	1

PROTOTYPE

Toro Part Number Index

Part No.	Page No.	Ref. No.	Qty.	Description
112843	5	13	1	Washer–PTO
5–0930	5	16	1	Key–Sq
12–5950	7	6	2	Rod–Support
23–0660	4	18	1	Switch–Starter
27–6230	5	8	1	Bolt–Wheel
28–3891	7	10	1	Wire Red
29–0590	6	12	1	Screen–Filler
29–0642	1	6	1	Jiffy–Trim
44–5940	5	15	1	Pulley–Drive
51–4540–03	1	17	1	Retainer–Clutch
54–0890	1	4	1	Decal–Rotating
54–2970	4	27	2	Spacer
54–3090	7	3	1	Wire–ASM
54–3200	5	14	1	Clutch ASM
55–3570	5	1	1	Cap–Fuel
62–4300	7	7	1	Pad–Anti Skid
62–4540–03	5	10	1	Pulley–Idler
63–7590	4	10	2	Relay
63–8360	4	22	2	Key–Ignition
65–7410	5	27	2	Switch–Single Pole
67–8110	6	39	2	Filter–Oil
68–2190	5	7	1	Spring–Extension
68–3810	7	13	1	Tube–Vent
74–0521	3	24	1	Rod–Fitting
74–0720	4	8	1	Tube–Manual
75–6820	4	24	1	Hour Meter
76–0200	6	11	1	ASM–Cap
77–0980	7	12	1	Boot–Terminal
77–0981	7	11	1	Boot–Terminal
80–6090	6	35	2	Key–Square
82–2181–03	4	23	1	Panel–Control
82–2190	3	11	1	Switch–Bail
82–2300	4	1	1	Switch
82–3790	5	36	2	Arm–Control
82–3820	4	2	1	Boot–Switch
82–3830	6	29	2	Hub–Wheel
82–3840	3	21	2	Spacer–Latch
82–3920	2	23	2	Stop–Reverse
82–4110	6	34	1	V Belt
82–4130	2	1	4	Bearing
82–4160	2	20	2	Spring–Detent
82–4170	6	7	1	ASM–Hose
82–4180	6	6	1	ASM–Hose
82–4190	6	15	2	ASM–Hose
82–4200	6	16	1	ASM–Hose
82–4201	6	9	1	ASM–Hose
82–4210–01	2	4	1	Bracket–Bushing
82–4220	1	24	1	Cooler–Oil
82–4240	2	21	2	Spacer–Bearing
82–4330–01	2	14	1	Arm–Detent LH
82–4340–01	2	15	1	Arm–Detent RH
82–4370	2	16	2	Bushing–Arm
82–4390	5	4	1	Hose–Fuel
82–4540	6	2	1	ASM–Hose
82–4550	6	1	2	ASM–Hose
82–4560	6	24	1	ASM–Hose
82–4570	5	28	2	Plate–Switch
82–4580–03	5	25	2	Bracket–Neutral
82–4590	3	17	1	Decal–Slope Warning
82–4600	2	26	2	Decal–Hydro
82–4620–01	7	2	1	Strap–Battery
82–4640	7	8	1	Battery–12 Volt

*Not Illustrated

PROTOTYPE

Toro Part Number Index (cont.)

Part No.	Page No.	Ref. No.	Qty.	Description
82–7741	4	5	A/R	Decal–Control Panel
82–8230	6	22	2	Motor–Wheel
84–1830	7	14	1	Cap–Battery
86–4730–01	6	37	2	Plate–Frame
86–4740–01	6	36	2	Spacer–Frame
86–4770–03	5	6	1	Lever–Idler
86–9080	6	41	1	Head–Filter
88–1880	5	5	1	Spring–Compression
93–1169	1	18	1	Engine–Kohler
93–1176	1	12	2	Spacer–Engine
93–1177	5	41	1	Spacer–Pulley
93–1180–01	7	5	1	Plate–Battery
93–1183–03	1	26	1	Mount–Cooler
93–1187–03	4	16	1	Panel–Bottom
93–1190	4	3	1	Control–Throttle
93–1191	4	26	1	Control–Choke
94–9054–01	2	34	1	Arm–Pivot LH
94–9057	2	7	1	Lever–Pivot LH
94–9059	2	5	1	Lever–Pivot RH
94–9061–01	2	35	1	Arm–Pivot RH
94–9062	2	11	2	Sleeve
94–9093	2	9	2	Rod–Link
94–9095	3	15	1	Rod–Control
94–9096–01	2	37	1	Frame ASM
94–9664	6	26	2	ASM–Wheel & Tire
94–9666	4	17	1	Module
95–1504	3	4	1	Turnbuckle
95–1505	3	5	1	Rod–Control
95–1506	3	1	1	Rod–Control
95–1507–03	3	9	1	Control Bar ASM
95–1510–03	3	10	1	Bail ASM
95–1513–03	3	16	1	Pivot ASM
95–1516	2	30	2	Spacer–Tubular
95–1522–01	2	39	1	Bracket–Pivot
95–1523	3	12	1	Decal–Traction Drive
95–1524	3	13	1	Decal–T Bar
95–1526	5	21	1	Trailing Shield
95–1528	6	33	2	Pulley–Pump
95–1529	5	20	1	Rod–Shield
95–1530–01	2	29	1	Bracket–Pivot
95–1532	6	13	1	Reservoir–Oil
95–1536	3	7	1	Handle ASM
95–1538	5	32	2	Hydraulic Pump ASM
95–1543	5	37	1	Decal–Valve Adjust
95–1544	4	4	1	Decal–Warning
95–2802	5	2	1	Tank–Fuel
95–2808	3	27	1	Harness–Wire
95–2814	1	1	1	Decal–Fuel Shut–Off
95–5853	3	22	2	Lock ASM–Quick Release
95–5854	3	33	2	Sleeve
95–5855–03	3	18	2	Spacer–Pivot
95–5856–03	3	29	1	Handle–Upper
95–5857	4	5	1	Decal–Control Panel
95–5862	3	34	1	Decal–Speed Lock
95–5868–01	2	40	1	Guard–Filter
218–461	4	21	1	Nut–HH
218–595	3	30	1	Connector–Body
231–117	6	26:3	2	Tire–15x6
232–27	6	26:1	2	Valve Stem & Cap Assemby
237–30	6	3:1	4	O–Ring
237–79	6	3:2	4	O–Ring
237–124	5	34	1	Grommet

*Not Illustrated

PROTOTYPE

Toro Part Number Index (cont.)

Part No.	Page No.	Ref. No.	Qty.	Description
240–9	1	7	2	Grommet
242–50	6	27	8	Nut–Lug
242–87	6	26:2	2	Wheel
2410–71	1	5	2	Cap–Plug
2412–98	5	3	2	Clamp–Hose
2412–120	4	9	2	Clamp–R
2412–134	1	25	2	Clamp R
2412–136	1	8	2	Clamp
251–259	2	22	2	Bearing–Ball
257–5	2	36	2	Washer–Thrust
283–6	3	25	1	Pin–Clevis
283–55	3	20	2	Pin–Clevis
288–4	1	21	1	Cap–Pipe
289–42	1	19	1	Nipple–Pipe
2811–10	1	20	1	Elbow
2815–15	6	10	1	Fitting–Hydraulic
2815–16	6	5	1	Fitting–Hydraulic
321–3	2	25	11	Screw–HH
321–3	4	14	2	Screw–HH
321–3	6	43	2	Screw–HH
321–8	2	31	2	Screw–HH
321–39	1	3	4	Screw–HH
322–3	5	18	4	Screw–HH
322–3	6	18	3	Screw–HH
322–3	7	9	2	Screw–HH
322–5	2	2	2	Screw–HH
322–7	2	18	2	Screw–HH
322–7	5	35	2	Screw–HH
322–9	1	15	2	Screw–HH
322–11	1	14	2	Screw–HH
322–14	2	24	2	Screw–HH
323–6	2	27	6	Screw–HH
323–9	5	11	1	Screw–HH
324–5	5	22	4	Screw–HH
325–11	6	31	8	Screw–HH
3212–9	5	12	1	Screw–HH
3213–8	6	30	8	Screw–HH
3218–2	2	10	4	Nut–Hex Jam
3234–11	3	26	4	Screw–HHF
3234–22	7	19	2	Screw–Hfh
3234–32	7	18	4	Screw–HH
3241–5	6	32	4	Set Screw
3253–3	6	42	2	Washer–Lock
3253–4	1	16	1	Washer–Lock
3253–4	5	19	4	Washer–Lock
3253–4	6	17	3	Washer–Lock
3254–5	4	19	1	Washer–Lock
3255–7	4	13	A/R	Washer–Lock
3255–8	1	11	1	Washer–Lock
3256–1	1	2	4	Washer–Flat
3256–1	5	24	4	Washer–Flat
3256–23	1	13	4	Washer–Flat
3256–23	2	17	2	Washer–Flat
3256–23	3	23	1	Washer–Flat
3257–8	6	25	2	Key–Woodruff
3269–8	5	38	2	Rivet
3274–32	2	19	2	Screw–HH
3290–307	3	2	4	Pin–Cotter
3290–378	2	3	1	Tie–Cable
3290–378	3	8	3	Tie–Cable
3290–378	5	26	2	Tie–Cable
3290–392	4	15	A/R	Screw–HH

PROTOTYPE

*Not Illustrated

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3296–2	3	6	1	Nut Lock
3296–2	4	6	4	Nut Lock
3296–6	5	17	1	Nut–Lock
3296–23	6	38	8	Nut–Lock
3296–29	2	6	6	Nut–Lock
3296–29	5	30	2	Nut–Lock
3296–39	2	38	6	Nut–Lock
3296–39	5	9	1	Nut–Lock
3296–42	1	23	2	Nut–Lock
3296–42	2	32	11	Nut–Lock
3296–42	4	12	2	Nut–Lock
3296–42	7	1	2	Nut–Lock
3296–47	2	13	2	Nut–Lock
3296–54	4	11	A/R	Nut
32103–3	3	3	1	Nut–Wing
32104–76	4	20	4	Screw–Self TAP
32105–12	3	14	1	Screw–Hex
32105–14	4	7	4	Screw–HH
32112–17	6	28	8	Pushnut
32121–4	2	33	2	Pin–Roll
32128–10	2	28	2	Nut–Lock HHF
32128–21	3	28	4	Nut–Hfh
32128–23	7	17	6	Nut–Lock
32128–42	5	33	4	Nut–Hex Flange
32144–1	5	29	4	Screw–HH
32144–3	5	23	4	Screw–HWH
32144–18	4	25	2	Screw–HWH
32144–74	1	22	2	Screw
32149–1	1	9	1	Nut–Keps
32149–1	7	4	2	Nut–Keps
32151–3	2	8	4	Ring–Retaining
32151–80	3	19	2	Ring–Push On
32153–3	1	10	4	Nut
33023–00	3	31	2	Nut–Lock
340–4	6	3	4	Fitting–Hydraulic
340–6	6	23	4	Fitting–Hydraulic
354–115	6	8	2	Fitting–Hydraulic
354–116	6	4	2	Fitting–Hydraulic
354–117	6	40	2	Fitting–Hydraulic
354–118	6	14	2	Fitting–Hydraulic

PROTOTYPE

*Not Illustrated

MAINTENANCE RECORD

Date								

PROTOTYPE